

Table 4c. Average Annual Coal Transportation Costs from State to State by Railroad
(nominal dollars per ton)

Origin State	Destination State	2008	2009	2010	2011	2012	2013	2014	2015
Alabama	Alabama	\$14.43	W	W	W	W	W	W	W
Alabama	Georgia	W	W	W	-	-	-	-	-
Alabama	Kentucky	-	W	-	-	-	-	-	-
Alabama	New Jersey	W	-	-	-	-	-	-	-
Alabama	Pennsylvania	-	W	-	-	-	-	-	-
Arizona	Arizona	W	W	W	W	W	W	W	W
Colorado	Alabama	\$34.52	W	W	W	W	W	W	-
Colorado	Arizona	W	W	-	W	W	-	W	W
Colorado	Arkansas	W	-	-	-	-	-	-	-
Colorado	California	-	W	W	-	-	-	-	-
Colorado	Colorado	\$14.16	\$8.47	\$9.02	\$10.95	\$10.68	\$10.46	\$10.47	\$9.16
Colorado	Florida	-	-	-	-	-	W	-	W
Colorado	Georgia	W	-	-	-	-	-	-	-
Colorado	Illinois	-	-	W	W	W	W	-	-
Colorado	Indiana	-	W	W	-	-	-	W	-
Colorado	Iowa	W	-	-	-	-	-	-	-
Colorado	Kentucky	W	W	W	W	W	W	W	W
Colorado	Maryland	-	-	-	-	-	-	W	W
Colorado	Michigan	W	W	W	\$31.92	W	W	W	-
Colorado	Mississippi	W	W	W	W	W	W	W	W
Colorado	Nevada	W	W	W	-	-	-	W	W
Colorado	New Mexico	-	-	-	-	-	-	-	-
Colorado	New York	-	-	-	W	-	-	-	-
Colorado	Ohio	-	-	-	-	-	-	-	-
Colorado	Oklahoma	-	W	-	W	W	-	-	-
Colorado	Tennessee	\$24.46	\$23.13	\$25.23	\$29.29	\$30.23	\$28.23	\$29.62	-
Colorado	Utah	W	W	W	W	W	W	W	W
Colorado	Virginia	-	W	W	W	W	-	-	-
Colorado	Wisconsin	W	W	W	W	W	-	W	-
Illinois	Alabama	W	W	-	W	W	W	\$17.46	W
Illinois	Florida	W	W	-	W	W	\$37.54	\$31.56	\$29.28
Illinois	Georgia	W	-	W	\$38.56	\$37.00	\$27.15	\$26.16	\$32.60
Illinois	Illinois	W	W	W	W	\$11.55	W	-	-
Illinois	Indiana	\$11.18	\$12.60	\$13.12	\$13.92	\$14.85	\$15.03	\$13.92	\$14.59
Illinois	Iowa	W	-	-	-	-	-	-	-
Illinois	Kentucky	-	-	-	W	W	W	-	-
Illinois	Maryland	-	-	-	-	-	W	-	-
Illinois	Michigan	W	W	W	W	W	W	W	-
Illinois	Minnesota	W	-	-	-	-	-	-	-
Illinois	Mississippi	-	-	W	-	W	W	-	-
Illinois	Missouri	W	-	W	W	W	W	W	W
Illinois	North Carolina	-	-	-	-	W	\$41.79	\$43.66	W
Illinois	Ohio	W	-	-	-	W	-	-	-
Illinois	Pennsylvania	-	-	-	-	-	W	W	-
Illinois	South Carolina	-	-	W	W	W	W	W	W
Illinois	Tennessee	W	-	-	-	\$20.54	-	W	W
Illinois	West Virginia	-	-	-	W	-	-	-	-
Illinois	Wisconsin	-	W	W	-	-	-	-	-
Indiana	Alabama	-	W	W	W	W	\$20.51	W	\$19.94
Indiana	Florida	-	-	W	\$32.36	\$33.88	\$33.86	\$29.56	\$25.11
Indiana	Georgia	W	W	W	\$34.46	W	W	\$30.45	W
Indiana	Indiana	\$3.81	\$3.54	\$4.69	\$6.02	\$6.62	\$6.46	\$6.38	\$6.14
Indiana	Iowa	W	-	-	-	-	-	-	-
Indiana	Kentucky	W	W	W	W	W	W	W	W
Indiana	Michigan	W	-	-	-	-	-	-	-
Indiana	Minnesota	-	W	W	-	-	-	-	-
Indiana	New York	-	-	W	W	W	W	W	-
Indiana	North Carolina	-	-	-	W	W	-	-	-
Indiana	South Carolina	W	-	-	-	-	-	-	-
Indiana	Tennessee	-	W	W	W	W	W	W	W
Indiana	Wisconsin	W	W	-	-	-	-	-	-
Kansas	Georgia	-	-	-	-	-	-	-	-
Kentucky	Alabama	W	W	W	W	W	W	\$14.43	W
Kentucky	Delaware	W	W	-	-	-	W	-	-
Kentucky	Florida	\$24.86	\$32.06	\$31.49	\$30.92	\$32.95	\$34.33	\$30.38	\$28.54
Kentucky	Georgia	\$24.47	\$22.80	\$27.22	\$18.51	\$20.70	\$22.58	\$19.94	\$30.46
Kentucky	Indiana	W	W	-	W	-	-	-	-

Table 4c. Average Annual Coal Transportation Costs from State to State by Railroad
(nominal dollars per ton)

Origin State	Destination State	2008	2009	2010	2011	2012	2013	2014	2015
Kentucky	Kentucky	\$7.62	\$7.79	\$10.66	\$10.14	\$6.33	\$6.94	\$7.77	\$6.54
Kentucky	Maryland	\$24.43	\$23.69	\$25.15	\$27.68	\$29.21	W	W	W
Kentucky	Massachusetts	W	-	-	-	-	-	-	-
Kentucky	Michigan	\$14.51	\$16.31	\$15.17	\$18.92	\$17.39	\$17.10	\$18.25	\$16.23
Kentucky	Mississippi	W	W	W	W	W	W	W	W
Kentucky	Missouri	W	W	W	W	-	-	-	-
Kentucky	New Jersey	W	-	-	-	-	-	-	-
Kentucky	New York	W	W	-	-	-	-	-	-
Kentucky	North Carolina	\$22.22	\$21.61	\$23.14	\$24.63	\$24.80	\$27.15	\$28.81	\$25.84
Kentucky	Ohio	W	W	-	W	-	W	W	W
Kentucky	Pennsylvania	\$26.06	W	-	W	-	W	-	-
Kentucky	South Carolina	\$13.08	\$18.35	\$19.19	\$24.72	\$27.16	\$30.34	\$29.09	\$27.64
Kentucky	Tennessee	\$13.82	\$13.18	\$14.32	\$15.75	\$16.01	\$13.20	\$13.94	W
Kentucky	Virginia	\$18.89	\$17.91	\$19.67	\$20.13	\$20.52	\$20.19	\$18.95	\$17.83
Kentucky	West Virginia	-	-	\$14.71	\$10.79	\$13.62	W	W	-
Maryland	Maryland	-	W	-	-	-	-	-	-
Maryland	West Virginia	-	-	-	-	-	-	-	W
Missouri	Missouri	-	-	W	W	-	-	-	-
Montana	Alabama	-	-	-	-	-	-	-	-
Montana	Arizona	W	W	W	W	W	W	W	W
Montana	Colorado	-	W	-	-	-	-	-	-
Montana	Illinois	-	-	-	W	-	-	-	-
Montana	Indiana	W	W	W	-	-	-	-	-
Montana	Michigan	\$15.34	\$12.08	\$13.22	\$26.55	\$29.94	\$27.76	\$27.09	\$26.21
Montana	Minnesota	\$13.77	\$15.73	\$16.01	\$18.41	\$17.94	\$17.98	\$18.46	\$18.00
Montana	Missouri	-	-	-	-	-	W	-	-
Montana	Montana	-	-	-	W	-	-	-	-
Montana	Nevada	-	-	-	-	-	-	-	-
Montana	New York	\$39.36	W	-	-	-	-	-	-
Montana	North Dakota	W	W	W	W	W	W	W	W
Montana	Ohio	\$46.27	\$39.98	\$33.48	W	W	-	-	-
Montana	Oklahoma	-	-	-	W	-	-	-	-
Montana	Oregon	-	W	W	W	-	-	-	-
Montana	Pennsylvania	W	W	W	-	-	-	-	-
Montana	South Dakota	-	-	-	-	W	W	W	-
Montana	Texas	-	-	W	-	-	-	-	-
Montana	Washington	W	W	W	W	W	W	W	W
Montana	Wisconsin	-	W	W	\$30.08	W	W	W	W
New Mexico	Arizona	\$7.45	\$9.83	\$9.45	\$9.27	\$8.47	\$9.21	\$9.76	\$9.16
New Mexico	New Mexico	-	-	-	-	-	-	-	-
North Dakota	North Dakota	W	W	W	W	W	W	\$4.82	\$5.79
Ohio	Delaware	-	-	-	W	-	-	-	-
Ohio	Maryland	-	-	W	\$24.46	\$26.96	W	W	W
Ohio	Michigan	W	W	W	\$9.81	W	-	-	-
Ohio	New Jersey	-	-	-	-	W	W	-	-
Ohio	New York	W	-	W	W	W	-	-	-
Ohio	North Carolina	-	W	-	-	-	-	-	-
Ohio	Ohio	-	W	W	W	W	W	W	W
Ohio	Pennsylvania	\$18.52	W	W	\$24.19	\$28.17	W	\$23.23	W
Ohio	South Carolina	-	-	-	-	-	-	-	-
Ohio	Virginia	-	-	-	-	-	-	-	-
Ohio	West Virginia	-	-	-	W	W	-	W	-
Ohio	Wisconsin	-	-	-	-	W	-	-	-
Oklahoma	Kansas	-	-	-	W	-	-	-	-
Oklahoma	Missouri	-	-	-	W	W	W	-	-
Pennsylvania	Alabama	-	-	-	-	-	-	-	-
Pennsylvania	Delaware	W	-	W	-	-	W	W	W
Pennsylvania	Florida	-	W	W	W	-	-	W	W
Pennsylvania	Georgia	-	W	-	W	-	-	W	W
Pennsylvania	Indiana	\$19.61	\$15.46	\$16.99	W	W	W	\$21.39	W
Pennsylvania	Maine	-	-	-	-	W	-	-	-
Pennsylvania	Maryland	\$20.89	\$20.35	\$20.98	\$24.83	\$22.92	\$20.14	\$18.28	\$21.52
Pennsylvania	Massachusetts	-	-	-	-	W	W	-	-
Pennsylvania	Michigan	W	W	W	W	W	\$17.53	\$14.36	\$13.78
Pennsylvania	New Hampshire	W	W	W	W	W	W	W	W
Pennsylvania	New Jersey	W	W	W	W	W	W	\$26.89	W
Pennsylvania	New York	\$21.62	\$24.01	\$25.27	\$25.33	W	W	W	W
Pennsylvania	North Carolina	-	\$24.86	-	W	\$31.84	\$32.94	\$34.98	\$32.36
Pennsylvania	Ohio	\$13.58	\$11.14	\$10.73	\$11.42	\$13.27	\$16.71	\$16.21	W
Pennsylvania	Pennsylvania	\$11.83	\$12.75	\$14.91	\$15.04	\$15.94	\$13.01	\$14.70	\$13.70

Table 4c. Average Annual Coal Transportation Costs from State to State by Railroad
(nominal dollars per ton)

Origin State	Destination State	2008	2009	2010	2011	2012	2013	2014	2015
Pennsylvania	South Carolina	\$13.23	W	W	W	W	-	-	W
Pennsylvania	Virginia	-	W	W	-	W	W	W	W
Pennsylvania	West Virginia	W	W	W	W	W	W	W	W
Pennsylvania	Wisconsin	-	W	W	W	W	W	W	W
Tennessee	Alabama	-	W	-	-	-	-	W	-
Tennessee	Florida	-	-	-	-	-	-	-	-
Tennessee	Georgia	\$24.30	\$24.23	\$25.41	W	-	-	-	-
Tennessee	New Jersey	-	-	-	-	-	-	-	-
Tennessee	North Carolina	W	-	-	-	-	-	-	W
Tennessee	South Carolina	\$14.15	-	-	-	-	-	-	-
Tennessee	Tennessee	-	W	W	W	-	-	W	W
Tennessee	Virginia	-	-	W	-	-	-	-	-
Texas	Texas	-	-	-	-	-	W	W	-
Utah	Alabama	W	W	W	W	W	-	-	-
Utah	California	\$29.36	\$32.51	\$37.04	\$36.74	W	W	W	-
Utah	Indiana	-	-	-	-	-	-	-	-
Utah	Kentucky	W	W	W	W	W	-	-	-
Utah	Michigan	W	-	-	-	-	-	-	-
Utah	Missouri	W	W	W	W	W	-	-	-
Utah	Nebraska	W	W	-	-	-	-	-	-
Utah	Nevada	W	W	W	W	W	W	W	W
Utah	Pennsylvania	-	-	-	-	-	-	-	-
Utah	Tennessee	W	W	W	-	W	W	-	-
Utah	Utah	-	-	-	W	W	W	W	W
Utah	Wisconsin	W	W	-	-	-	-	-	-
Virginia	Alabama	W	W	W	-	-	-	W	-
Virginia	Florida	W	W	\$27.65	W	W	-	W	W
Virginia	Georgia	\$25.58	\$24.61	\$26.98	\$28.88	\$30.85	W	W	W
Virginia	Maryland	-	W	-	-	-	-	-	-
Virginia	Michigan	-	-	-	-	-	-	W	-
Virginia	Mississippi	W	W	W	W	W	W	W	-
Virginia	New Hampshire	W	W	W	W	W	-	-	-
Virginia	New Jersey	W	W	W	W	W	W	W	W
Virginia	North Carolina	\$21.63	\$19.39	\$19.85	\$20.60	\$22.89	W	\$24.42	\$21.79
Virginia	Ohio	W	W	W	W	-	-	-	-
Virginia	Pennsylvania	W	-	-	-	-	-	-	-
Virginia	South Carolina	\$12.35	\$11.66	W	\$30.90	\$31.68	\$30.58	W	\$29.33
Virginia	Tennessee	\$8.24	\$9.66	\$14.13	\$16.56	W	-	-	W
Virginia	Virginia	\$13.11	\$10.15	\$10.44	\$13.38	\$16.41	\$17.86	\$17.71	\$11.39
Virginia	West Virginia	-	-	-	W	W	W	-	-
West Virginia	Alabama	W	W	-	-	-	-	-	-
West Virginia	Delaware	W	W	W	-	-	-	W	W
West Virginia	Florida	\$30.78	\$28.14	\$32.02	\$32.88	\$25.79	\$26.58	\$32.53	\$25.31
West Virginia	Georgia	\$27.78	\$25.41	\$30.09	\$27.90	W	\$34.00	W	W
West Virginia	Indiana	\$20.94	\$16.83	W	W	-	W	-	-
West Virginia	Kentucky	W	\$8.74	W	W	W	-	-	-
West Virginia	Maryland	\$20.89	\$21.76	\$20.52	\$24.71	\$24.67	\$23.12	\$20.32	\$22.24
West Virginia	Massachusetts	-	W	W	W	-	-	-	-
West Virginia	Michigan	\$17.72	\$17.20	\$19.27	\$19.87	\$19.19	\$20.36	\$20.78	\$16.37
West Virginia	Mississippi	W	W	W	W	-	-	-	-
West Virginia	New Hampshire	W	W	W	W	W	W	W	W
West Virginia	New Jersey	W	W	-	W	W	\$6.48	W	W
West Virginia	New York	\$14.44	\$17.03	\$22.43	\$24.28	\$26.73	W	W	W
West Virginia	North Carolina	\$23.01	\$19.63	\$21.65	\$23.30	\$23.39	\$26.33	\$26.73	\$24.12
West Virginia	Ohio	\$19.78	\$11.59	\$10.51	\$12.12	W	-	W	W
West Virginia	Pennsylvania	\$18.72	\$16.49	\$15.99	\$17.35	\$20.17	\$23.63	\$21.38	\$14.34
West Virginia	South Carolina	\$15.37	\$23.35	\$24.59	\$24.80	\$24.94	\$28.29	\$30.28	\$28.91
West Virginia	Tennessee	\$11.00	W	\$19.21	\$21.16	W	W	W	W
West Virginia	Virginia	\$20.56	\$18.53	\$19.14	\$18.95	\$20.37	\$18.73	\$19.40	\$17.49
West Virginia	West Virginia	W	\$8.87	\$8.51	\$9.22	\$9.73	\$7.66	\$9.91	\$9.47
West Virginia	Wisconsin	W	-	W	W	-	W	W	W
Wyoming	Alabama	W	W	W	W	W	\$18.68	\$18.08	W
Wyoming	Arizona	\$21.81	W	W	W	\$24.37	\$25.04	\$25.22	\$23.27
Wyoming	Arkansas	W	\$17.91	\$18.27	\$20.46	\$21.47	\$23.47	\$23.88	\$24.46
Wyoming	Colorado	\$11.35	\$11.38	\$11.49	\$12.51	\$13.23	\$13.54	\$12.63	\$11.83
Wyoming	Florida	W	-	-	-	-	W	W	-
Wyoming	Georgia	W	W	W	W	W	W	W	W
Wyoming	Illinois	\$14.94	\$14.71	\$15.76	\$16.23	\$19.14	\$21.02	\$22.08	\$20.89
Wyoming	Indiana	\$22.46	\$19.99	\$20.29	\$30.13	\$30.11	\$28.92	W	W
Wyoming	Iowa	\$10.19	\$9.72	\$10.12	\$10.61	\$10.97	\$15.63	\$15.58	\$15.32

Table 4c. Average Annual Coal Transportation Costs from State to State by Railroad
(nominal dollars per ton)

Origin State	Destination State	2008	2009	2010	2011	2012	2013	2014	2015
Wyoming	Kansas	\$13.60	\$13.15	\$14.22	\$17.72	\$18.40	\$17.61	\$17.66	\$17.02
Wyoming	Kentucky	\$23.17	W	W	W	W	W	W	\$19.95
Wyoming	Louisiana	W	W	W	W	W	\$31.21	\$27.65	\$28.25
Wyoming	Maryland	W	W	W	W	W	W	W	W
Wyoming	Michigan	\$18.45	\$18.57	\$18.99	\$31.16	\$35.08	\$33.89	\$30.61	\$29.69
Wyoming	Minnesota	\$17.55	\$18.11	\$20.55	\$21.59	\$21.66	\$21.88	\$21.83	\$20.63
Wyoming	Mississippi	W	W	W	W	W	W	W	W
Wyoming	Missouri	\$14.89	\$12.79	\$13.99	\$16.76	\$18.54	\$18.87	\$20.16	\$18.86
Wyoming	Montana	W	W	W	W	W	W	W	W
Wyoming	Nebraska	\$8.15	\$9.92	\$10.87	\$11.74	\$14.35	\$13.75	\$12.60	\$11.85
Wyoming	Nevada	W	\$24.19	\$28.91	\$29.59	\$23.99	W	W	W
Wyoming	New Jersey	-	-	-	W	W	-	-	-
Wyoming	New York	-	-	-	-	-	W	W	W
Wyoming	North Dakota	W	W	W	W	W	W	W	W
Wyoming	Ohio	\$27.33	\$25.67	\$30.92	\$35.57	\$40.74	W	\$44.96	W
Wyoming	Oklahoma	\$13.51	\$18.22	\$17.83	\$18.58	\$21.03	\$22.55	\$22.09	\$21.50
Wyoming	Oregon	W	W	W	W	W	W	W	W
Wyoming	South Dakota	W	W	W	W	W	W	W	W
Wyoming	Tennessee	\$23.54	\$21.39	\$22.52	\$26.55	\$29.51	\$25.76	\$24.82	W
Wyoming	Texas	\$13.89	\$14.39	\$20.17	\$20.88	\$20.11	\$23.41	\$24.46	\$22.55
Wyoming	Utah	-	-	-	-	-	-	-	-
Wyoming	Washington	W	W	W	W	W	W	W	W
Wyoming	West Virginia	-	W	W	-	W	-	-	-
Wyoming	Wisconsin	\$18.87	\$19.39	\$19.99	\$25.44	\$24.99	\$25.65	\$24.98	\$25.46
Wyoming	Wyoming	\$6.74	\$5.61	\$5.29	\$5.48	\$5.71	\$5.83	\$6.29	\$6.18

Source: U.S. Energy Information Administration, Form EIA-923, "Power Plant Operations Report."

W = Withheld to avoid disclosure of individual company data.

Notes: Rates are based on a weighted average of the difference between the commodity cost and total delivered cost of coal shipments to plants in the electric power sector.

In addition, the rates are based on the primary transport mode selected by a plant's owner or operator so may include other secondary or tertiary modes. Values are presented in nominal dollars. For the composition of coal basins, refer to the definition of "coal-producing regions" in EIA's glossary at www.eia.gov/tools/glossary.

Table 4c. Average Annual Coal Transportation Costs from State to State by Railroad
(nominal dollars per ton)

Origin State		2016	2017	2018	2019	2020	2021	2022	2023
Alabama	Alabama	W	-	W	W	W	W	W	W
Alabama	Georgia	-	-	-	-	-	-	-	-
Alabama	Kentucky	-	-	-	-	-	-	-	-
Alabama	New Jersey	-	-	-	-	-	-	-	-
Alabama	Pennsylvania	-	-	-	-	-	-	-	-
Arizona	Arizona	W	W	W	W	-	-	-	-
Colorado	Alabama	-	-	-	-	-	-	-	-
Colorado	Arizona	W	W	-	-	W	W	-	-
Colorado	Arkansas	-	-	-	-	-	-	-	-
Colorado	California	-	-	-	-	-	-	-	-
Colorado	Colorado	\$9.55	\$7.17	W	W	W	W	W	W
Colorado	Florida	W	W	W	-	-	-	-	-
Colorado	Georgia	-	-	-	-	-	-	-	-
Colorado	Illinois	-	-	W	W	W	-	-	-
Colorado	Indiana	-	-	-	-	-	-	-	-
Colorado	Iowa	-	-	-	-	-	-	-	-
Colorado	Kentucky	-	W	-	-	-	-	-	-
Colorado	Maryland	W	W	W	W	-	-	-	-
Colorado	Michigan	-	-	-	-	W	W	W	-
Colorado	Mississippi	W	W	W	W	W	W	W	W
Colorado	Nevada	W	-	-	W	W	W	W	W
Colorado	New Mexico	-	-	-	W	-	-	-	-
Colorado	New York	-	-	-	-	-	-	-	-
Colorado	Ohio	W	W	W	W	W	W	W	-
Colorado	Oklahoma	-	-	-	-	-	W	-	-
Colorado	Tennessee	-	-	-	-	-	-	-	-
Colorado	Utah	W	W	W	W	W	W	W	W
Colorado	Virginia	-	-	-	-	-	-	-	-
Colorado	Wisconsin	W	-	-	-	-	-	-	-
Illinois	Alabama	W	W	W	-	-	-	-	-
Illinois	Florida	\$29.19	\$25.95	\$26.78	\$27.56	\$19.38	\$21.64	\$30.78	\$33.45
Illinois	Georgia	\$33.00	\$33.88	\$32.15	W	W	W	W	W
Illinois	Illinois	-	-	-	-	-	-	-	-
Illinois	Indiana	\$16.05	\$13.53	\$11.66	W	W	W	W	W
Illinois	Iowa	-	-	-	-	-	-	-	-
Illinois	Kentucky	-	-	W	-	-	W	W	W
Illinois	Maryland	-	-	-	-	-	-	-	-
Illinois	Michigan	-	-	-	-	-	-	-	-
Illinois	Minnesota	-	-	-	-	-	-	-	-
Illinois	Mississippi	-	W	-	-	-	-	-	-
Illinois	Missouri	W	W	W	W	W	W	W	W
Illinois	North Carolina	W	W	W	-	-	-	-	-
Illinois	Ohio	-	-	-	-	-	-	-	-
Illinois	Pennsylvania	-	-	-	-	-	-	-	-
Illinois	South Carolina	W	W	W	W	W	W	W	W
Illinois	Tennessee	W	W	W	W	W	W	\$12.81	W
Illinois	West Virginia	-	-	-	-	-	-	-	-
Illinois	Wisconsin	-	-	-	-	-	-	-	-
Indiana	Alabama	W	W	W	W	-	-	W	W
Indiana	Florida	\$24.74	\$23.35	\$24.61	\$26.94	\$21.12	\$32.08	W	W
Indiana	Georgia	\$33.52	W	W	W	W	W	W	W
Indiana	Indiana	\$6.10	\$5.79	\$6.14	\$5.84	\$5.97	\$6.47	\$7.19	\$7.57
Indiana	Iowa	-	-	-	-	-	-	-	-
Indiana	Kentucky	W	W	W	W	W	W	W	W
Indiana	Michigan	W	-	-	-	-	-	-	-
Indiana	Minnesota	-	-	-	-	-	-	-	-
Indiana	New York	-	W	-	-	-	-	-	-
Indiana	North Carolina	-	\$31.45	W	W	W	W	W	W
Indiana	South Carolina	-	-	W	W	-	-	-	-
Indiana	Tennessee	W	W	W	W	W	W	W	W
Indiana	Wisconsin	W	-	-	-	-	-	-	-
Kansas	Georgia	W	-	-	-	-	-	-	-
Kentucky	Alabama	-	-	-	-	-	-	-	W
Kentucky	Delaware	-	-	-	-	-	-	-	-
Kentucky	Florida	\$27.06	\$27.66	\$29.00	\$29.01	W	\$16.84	\$21.29	W
Kentucky	Georgia	W	W	W	W	-	W	W	W
Kentucky	Indiana	-	-	-	-	-	-	-	-

Table 4c. Average Annual Coal Transportation Costs from State to State by Railroad
(nominal dollars per ton)

Origin State		2016	2017	2018	2019	2020	2021	2022	2023
Kentucky	Kentucky	\$5.69	W	W	\$5.75	\$5.72	\$6.01	\$14.53	\$7.92
Kentucky	Maryland	W	-	-	-	-	-	W	W
Kentucky	Massachusetts	-	-	-	-	-	-	-	-
Kentucky	Michigan	W	-	-	-	-	-	-	-
Kentucky	Mississippi	W	-	-	-	-	-	-	-
Kentucky	Missouri	-	-	-	-	-	-	-	-
Kentucky	New Jersey	-	-	-	W	W	W	W	-
Kentucky	New York	-	-	-	-	-	-	-	-
Kentucky	North Carolina	\$22.75	\$26.53	\$29.63	\$24.28	\$20.42	W	W	W
Kentucky	Ohio	-	-	-	-	-	-	-	-
Kentucky	Pennsylvania	-	-	-	-	-	-	-	-
Kentucky	South Carolina	\$27.29	\$29.04	\$26.67	\$27.02	\$29.82	\$27.26	\$29.26	\$30.74
Kentucky	Tennessee	W	W	W	W	W	W	\$18.50	W
Kentucky	Virginia	\$20.77	\$21.62	\$21.62	\$19.60	W	W	W	W
Kentucky	West Virginia	W	W	W	-	-	-	-	-
Maryland	Maryland	-	-	-	-	-	-	-	-
Maryland	West Virginia	-	-	-	W	W	-	W	-
Missouri	Missouri	-	-	-	-	-	-	-	-
Montana	Alabama	-	W	-	-	-	-	-	-
Montana	Arizona	W	W	W	W	W	W	W	W
Montana	Colorado	-	-	-	-	-	-	-	-
Montana	Illinois	-	-	-	-	-	-	-	-
Montana	Indiana	-	-	-	-	-	-	-	-
Montana	Michigan	\$23.72	\$21.77	\$23.66	W	W	W	W	W
Montana	Minnesota	W	W	\$22.42	\$18.68	\$18.25	\$20.16	W	W
Montana	Missouri	-	-	-	-	-	-	-	-
Montana	Montana	-	-	-	-	-	-	-	-
Montana	Nevada	-	-	-	-	-	-	-	W
Montana	New York	-	-	-	-	-	-	-	-
Montana	North Dakota	W	W	-	-	-	-	-	-
Montana	Ohio	-	-	-	W	-	-	-	-
Montana	Oklahoma	-	-	-	-	-	-	-	-
Montana	Oregon	-	-	-	-	-	-	-	-
Montana	Pennsylvania	-	-	-	-	-	-	-	-
Montana	South Dakota	-	-	-	-	-	-	-	-
Montana	Texas	-	-	-	-	-	-	-	-
Montana	Washington	W	W	W	W	W	W	W	W
Montana	Wisconsin	-	-	-	-	-	-	W	-
New Mexico	Arizona	\$7.91	\$8.38	\$7.54	\$7.88	\$7.77	\$8.04	\$9.90	\$10.23
New Mexico	New Mexico	W	W	W	W	W	-	-	-
North Dakota	North Dakota	\$5.72	\$5.56	\$5.90	\$5.54	\$5.29	W	\$6.15	W
Ohio	Delaware	-	-	-	-	-	-	-	-
Ohio	Maryland	W	\$29.82	W	-	-	-	-	-
Ohio	Michigan	-	-	-	-	-	-	-	-
Ohio	New Jersey	-	-	-	-	-	W	-	-
Ohio	New York	-	-	-	-	-	-	-	-
Ohio	North Carolina	-	-	-	-	-	-	-	-
Ohio	Ohio	W	-	-	-	-	-	-	-
Ohio	Pennsylvania	W	-	-	-	-	-	-	-
Ohio	South Carolina	-	-	-	-	-	-	W	-
Ohio	Virginia	-	-	-	-	-	-	W	-
Ohio	West Virginia	-	-	-	-	-	-	-	-
Ohio	Wisconsin	-	-	-	-	-	-	-	-
Oklahoma	Kansas	-	-	-	-	-	-	-	-
Oklahoma	Missouri	-	-	-	-	-	-	-	-
Pennsylvania	Alabama	W	-	-	-	-	-	-	-
Pennsylvania	Delaware	W	W	W	W	-	-	W	W
Pennsylvania	Florida	W	W	-	-	-	W	-	-
Pennsylvania	Georgia	W	W	W	W	W	W	W	W
Pennsylvania	Indiana	W	W	W	W	W	-	-	-
Pennsylvania	Maine	-	-	-	-	-	-	-	-
Pennsylvania	Maryland	\$21.96	\$21.33	\$21.05	\$20.69	\$24.98	\$21.57	W	W
Pennsylvania	Massachusetts	-	-	-	-	-	-	-	-
Pennsylvania	Michigan	\$13.30	\$9.84	W	\$10.02	W	W	W	W
Pennsylvania	New Hampshire	W	-	-	-	-	-	-	-
Pennsylvania	New Jersey	W	W	W	W	W	-	-	-
Pennsylvania	New York	W	W	W	-	-	-	-	-
Pennsylvania	North Carolina	\$31.02	\$31.21	\$32.59	\$17.58	\$15.06	\$23.80	\$30.14	\$37.44
Pennsylvania	Ohio	-	-	-	-	-	-	-	-
Pennsylvania	Pennsylvania	\$9.03	\$9.12	\$10.55	\$11.04	\$11.26	\$10.70	\$12.85	W

Table 4c. Average Annual Coal Transportation Costs from State to State by Railroad
(nominal dollars per ton)

Origin State		2016	2017	2018	2019	2020	2021	2022	2023
Pennsylvania	South Carolina	W	W	W	W	-	-	-	-
Pennsylvania	Virginia	W	W	W	W	W	W	-	-
Pennsylvania	West Virginia	W	W	W	W	W	-	W	W
Pennsylvania	Wisconsin	W	W	W	W	W	W	W	W
Tennessee	Alabama	-	-	-	-	-	-	-	-
Tennessee	Florida	-	W	-	-	-	-	-	-
Tennessee	Georgia	-	-	-	-	-	-	-	-
Tennessee	New Jersey	W	-	-	-	-	-	-	-
Tennessee	North Carolina	W	-	-	-	-	-	-	-
Tennessee	South Carolina	-	-	-	-	-	-	-	-
Tennessee	Tennessee	W	W	-	W	-	-	-	-
Tennessee	Virginia	-	-	-	-	-	-	-	-
Texas	Texas	-	W	W	W	W	W	W	W
Utah	Alabama	-	-	-	-	-	-	-	-
Utah	California	-	-	-	-	-	-	-	-
Utah	Indiana	-	-	-	-	-	-	W	W
Utah	Kentucky	-	-	-	-	-	-	-	W
Utah	Michigan	-	-	-	-	-	-	-	-
Utah	Missouri	-	-	-	-	-	-	-	-
Utah	Nebraska	-	-	-	-	-	-	-	-
Utah	Nevada	W	-	W	W	W	W	W	-
Utah	Pennsylvania	W	-	-	-	-	-	-	-
Utah	Tennessee	-	-	-	-	-	W	W	-
Utah	Utah	W	W	W	W	W	W	W	W
Utah	Wisconsin	-	-	-	-	-	-	-	-
Virginia	Alabama	-	-	-	-	-	-	-	-
Virginia	Florida	-	-	-	-	-	-	-	-
Virginia	Georgia	W	W	W	-	-	-	-	-
Virginia	Maryland	W	-	-	-	-	-	-	-
Virginia	Michigan	-	-	-	-	-	-	-	-
Virginia	Mississippi	-	-	-	-	-	-	-	-
Virginia	New Hampshire	-	-	-	-	-	-	-	-
Virginia	New Jersey	W	W	W	-	-	-	-	-
Virginia	North Carolina	\$20.68	\$23.05	\$22.83	\$19.97	-	-	-	-
Virginia	Ohio	-	-	-	-	-	-	-	-
Virginia	Pennsylvania	-	-	-	-	-	-	-	-
Virginia	South Carolina	W	W	W	-	-	W	-	-
Virginia	Tennessee	W	W	-	W	-	-	-	-
Virginia	Virginia	\$10.52	W	W	W	W	W	W	W
Virginia	West Virginia	-	W	-	W	-	-	-	-
West Virginia	Alabama	-	-	-	-	-	-	-	-
West Virginia	Delaware	-	-	-	-	-	W	-	-
West Virginia	Florida	\$23.94	W	W	W	-	W	W	-
West Virginia	Georgia	-	-	-	-	-	-	-	-
West Virginia	Indiana	-	W	W	W	-	W	W	W
West Virginia	Kentucky	-	-	-	-	-	-	-	-
West Virginia	Maryland	\$21.10	\$22.61	\$22.18	\$23.60	W	W	\$15.19	W
West Virginia	Massachusetts	-	-	-	-	-	-	-	-
West Virginia	Michigan	W	W	-	W	W	W	W	W
West Virginia	Mississippi	W	W	-	-	-	-	-	-
West Virginia	New Hampshire	W	-	-	W	W	-	W	-
West Virginia	New Jersey	\$10.73	W	W	W	W	W	-	-
West Virginia	New York	W	W	W	W	-	-	-	-
West Virginia	North Carolina	\$22.86	\$23.11	\$24.97	\$14.48	\$10.58	\$18.81	\$26.04	\$30.66
West Virginia	Ohio	W	-	-	-	-	-	-	-
West Virginia	Pennsylvania	\$14.35	\$11.54	\$12.54	\$14.82	W	\$15.42	W	W
West Virginia	South Carolina	\$28.75	\$27.47	\$24.93	\$26.82	W	\$24.01	\$27.41	\$31.04
West Virginia	Tennessee	W	W	-	W	-	-	-	-
West Virginia	Virginia	\$17.33	\$18.99	\$20.21	\$20.39	W	W	W	W
West Virginia	West Virginia	\$9.92	\$10.32	\$10.14	\$10.69	\$10.47	W	W	\$15.54
West Virginia	Wisconsin	W	W	W	W	-	-	-	W
Wyoming	Alabama	W	W	W	W	W	W	W	W
Wyoming	Arizona	\$25.89	\$28.68	\$30.38	\$31.28	\$27.90	\$30.78	\$39.74	\$41.87
Wyoming	Arkansas	\$23.84	\$22.24	\$22.59	\$22.46	\$20.82	\$23.37	\$25.61	\$24.28
Wyoming	Colorado	\$11.55	\$11.88	\$12.15	\$12.59	\$12.42	\$13.01	\$14.06	\$15.06
Wyoming	Florida	-	-	-	-	-	-	-	-
Wyoming	Georgia	W	W	W	W	W	W	W	W
Wyoming	Illinois	\$20.51	\$20.63	\$21.04	\$21.98	\$19.17	\$21.60	\$24.36	\$23.59
Wyoming	Indiana	W	W	\$20.59	W	W	W	W	W
Wyoming	Iowa	\$14.49	\$15.50	\$15.78	\$15.13	\$14.96	\$16.09	\$17.53	\$16.46

Table 4c. Average Annual Coal Transportation Costs from State to State by Railroad
(nominal dollars per ton)

Origin State		2016	2017	2018	2019	2020	2021	2022	2023
Wyoming	Kansas	\$17.01	\$17.21	\$17.31	\$16.18	\$15.22	\$14.72	\$16.79	\$15.61
Wyoming	Kentucky	\$19.10	\$19.93	\$20.50	\$17.64	\$17.42	\$18.52	\$22.29	\$23.32
Wyoming	Louisiana	\$28.78	\$26.47	\$27.41	\$27.51	\$28.46	\$29.17	\$34.46	W
Wyoming	Maryland	W	W	W	-	-	-	-	-
Wyoming	Michigan	\$28.01	\$26.50	\$26.69	\$24.58	\$23.37	\$24.37	\$28.35	\$29.61
Wyoming	Minnesota	\$24.76	\$25.84	\$27.11	\$23.95	\$22.32	\$24.69	\$27.92	\$29.01
Wyoming	Mississippi	W	W	W	W	W	W	W	W
Wyoming	Missouri	\$17.99	\$17.58	\$18.25	\$17.54	\$15.29	\$17.10	\$20.23	\$20.16
Wyoming	Montana	-	-	-	-	-	-	-	-
Wyoming	Nebraska	\$11.55	\$11.91	\$11.31	\$10.92	\$10.76	\$9.93	\$10.94	\$10.48
Wyoming	Nevada	W	W	W	W	W	W	W	W
Wyoming	New Jersey	-	-	-	-	-	-	-	-
Wyoming	New York	-	-	-	-	-	-	-	-
Wyoming	North Dakota	W	W	-	-	-	-	-	-
Wyoming	Ohio	W	W	W	W	W	W	W	-
Wyoming	Oklahoma	\$20.18	\$20.62	\$20.45	\$19.26	\$17.37	\$19.13	\$20.72	\$20.96
Wyoming	Oregon	W	W	W	W	W	-	-	-
Wyoming	South Dakota	W	W	W	W	W	W	W	W
Wyoming	Tennessee	W	W	W	W	W	W	W	W
Wyoming	Texas	\$21.47	\$21.75	\$22.18	\$21.64	\$19.81	\$22.14	\$24.70	\$24.03
Wyoming	Utah	-	-	-	-	-	-	-	W
Wyoming	Washington	W	W	W	W	W	W	W	W
Wyoming	West Virginia	-	-	-	-	-	-	-	-
Wyoming	Wisconsin	\$24.30	\$25.28	\$27.27	\$26.89	\$22.11	\$24.36	\$30.00	\$27.70
Wyoming	Wyoming	\$6.16	\$6.28	\$6.65	\$6.72	\$6.41	\$6.84	\$7.45	\$7.92

Source: U.S. Energy Information Administration, Form EIA-923, "Power Plant Operations Report."

W = Withheld to avoid disclosure of individual company data.

Notes: Rates are based on a weighted average of the difference between the commodity cost and total delivered cost of coal shipments to plants in the electric power sector.

In addition, the rates are based on the primary transport mode selected by a plant's owner or operator so may include other secondary or tertiary modes. Values are presented in nominal dollars. For the composition of coal basins, refer to the definition of "coal-producing regions" in EIA's glossary at www.eia.gov/tools/glossary.