



JOB LOSSES DUE TO COAL PLANT SHUTDOWNS

EPA regulations have been cited as a factor in the announced closure of 205 coal units, representing more than 31,000 megawatts (MW) of coal-fueled generating capacity in 26 states. These closures are current as of the end of September. We conservatively estimate that coal plant shutdowns will cause the loss of 13,000 – 17,000 jobs.

METHODOLOGY Power plant owners have announced the shutdown of 31,283 MW of coal capacity due, at least in part, to EPA regulations such as the Mercury and Air Toxics Standards (MATS) rule. In addition, EPA policies appear to have played a role in over 4,800 MW of other announced shutdowns. If these are added together, the closures total over 36,000 MW and represent approximately 11 percent of U.S. coal electric generating capacity. Most of these plant shutdowns are expected to occur by 2015 and will result in direct job losses at the plants, as well as indirect and induced jobs lost in the communities where the plants operate.¹ To estimate direct job losses, ACCCE used the following methodology:

Where companies have announced a specific number of job losses due to shutdowns, we used the company-announced numbers. When companies announced a total number of job losses summed across several plants, we apportioned those losses to individual plants or units by share of the total generating capacity closing. In cases where companies have not announced a specific number of job losses, we estimated losses as follows:

- a) If a company's public information indicates the number of employees at a plant and the entire plant is closing, those jobs are counted as job losses.
- b) Otherwise, we used factors to estimate job losses. The factors are derived from (1) the number of employees reported on FERC Form 1 from a sample of large and small coal

¹ Indirect jobs are those that support the power plant, such as equipment suppliers. Induced jobs are jobs that are associated with the payroll spending of the direct and indirect jobs, such as jobs at grocery stores.

plants, and (2) the number of employees for a new 1,000 MW coal plant reported by the Nuclear Energy Institute based on U.S. DOE and Ventyx data. The “coal factors” are 0.12 – 0.22 employee per MW. For example, the shutdown of a 100 MW coal plant would result in an estimated 12 – 22 lost jobs.

- c) In cases where coal units are being converted to natural gas, or natural gas units are to remain in operation at a site, estimated employment to operate the gas units is subtracted from the estimated job losses due to closing coal units at the same site using a “gas factor” of 0.06 employee per MW. These factors are derived in the same manner as the coal factors above. Thus, a 100 MW gas unit is estimated to require six employees.
- d) In cases where very small coal units are closing at a plant where one or more large coal units will remain in operation, we assume no job losses at the plant in order to be conservative.
- e) In cases where coal units are converting to biomass, we also assume no job losses at the plant in order to be conservative.

RESULTS Using this methodology, ACCCE estimates 4,000 to 5,000 direct job losses due to announced coal plant shutdowns. To estimate other job losses, we use state-based employment multipliers from the U.S. Bureau of Economic Analysis.² The state multipliers give the total of direct, indirect, and induced job losses for every job lost at a coal plant. Based on these state multipliers, the estimated direct losses of 4,000 to 5,000 jobs caused by coal plant shutdowns would lead to total job losses (direct plus indirect and induced job losses) from currently-announced coal plant retirements of 12,700 to 16,600 jobs.

States with the most job losses are Ohio and Pennsylvania, each with about 3,000 jobs lost; Virginia and North Carolina with as many as 1,300 job losses; and Illinois, West Virginia,

² U.S. Department of Commerce, Bureau of Economic Analysis, Regional Input-Output Modeling System (RIMS II) Type II state-level multipliers for industry code 2211A0 (electric power generation, transmission, and distribution).

Indiana, and Texas with as many as 1,000 job losses each. Thirteen other states suffer job losses as well. We estimate no job losses in several states because at plants in those states, plant owners have announced there will be no net job losses, or because smaller units are closing or converting at sites where larger coal units will remain in operation.

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