In establishing coal inventory targets, plant-specific supplier and transportation factors are considered. Plant-specific criteria can include the coal transportation and unloading options that are available (truck, barge, and rail); the quantity of third-party suppliers; and whether the plant has a high capacity factor (base loaded) or low capacity factor (peaking). Additional consideration is given to the diversion and back-up supply capabilities involving other plants in the AEP System; the burn variability that is forecast for the plant; and the distance and lead time that is necessary to transport coal from the mine to the plant.

KPCo must also consider the probability of interruptions of the coal supply and transportation, how long such interruptions may last, and how much coal is necessary to provide for these contingencies. Supply disruptions can occur as the result of labor stoppages at either mining operations or by transportation employees; mine production and permitting difficulties; extreme weather events such as blizzards, frozen river conditions, hurricanes, and floods which can affect both mines and all transportation modes; river levels and lock repair schedules; shortages of both mining and transportation equipment and supplies; and derailments which can result in significant and sometimes extended limitations on coal deliveries.

Target inventory levels are determined based on the number of days that the plant may be expected to operate using only the coal inventory available at the plant site. A “days-burn” is defined as the number of tons that the plant would burn in one day at full load. Each pile is initially allocated a base level of “security inventory” as expressed in terms of a number of days-burn. Additions are made to this base amount in consideration of the criteria explained above.

When determining the target for the Mitchell High Sulfur coal pile, significant consideration is given to the transportation method. Due to the source of the coal being a few miles from the Plant, a conveyor is utilized to minimize interruptions in the transportation of such coal. Additionally, if the conveyor to the plant is out of service or the mine is unable to provide coal, the plant may unload high sulfur coal of similar quality via the barge unloader. Due to this optionality and the ready supply of High Sulfur coal from nearby suppliers in the upper Ohio River region, the target level for a secure inventory is lower than typical (15 days). In contrast, the Low Sulfur coal pile does not have the same number of alternate methods of delivery, with all of the coal tonnage being delivered by a single mode (via the barge unloader). Due to the number of dams on the Ohio River separating the sources from the Mitchell Plant and the less than desirable condition of these dams, and the potential for the river to freeze, experience low water in the summer time, or high water conditions in the spring time, the Low Sulfur coal pile target is higher, with a target inventory of 30 days. Even though there are many available Low Sulfur coal suppliers in the Big Sandy and Kanawha River areas, a disruption on the river can be very difficult as the delivery of all such supply is impacted. Therefore, a larger Low Sulfur coal inventory is necessary to provide for a reasonable period of full-load plant operations until the river issue has been resolved or to plan for and execute non-routine alternatives to address the disruption.