Xcel Energy's Tolk Station

FACILITY

The coal-handling facility at Tolk Station is very similar to that at the Harrington Station with the exception of a rotary car dump rather than an elevated bottom dump. Coal drops out of rail cars into a temporary storage pocket prior to being moved onto the surface live pile.

INSTALLATION

In a fashion similar to Harrington, carbon monoxide monitors were installed within the reclaim tunnel, crusher building, belt galleries, tripper deck, and bag houses.

As an added precaution, five methane monitors were installed. Three methane monitors were placed within the reclaim tunnel, while two were mounted inside a building near the tunnel through which the coal enters the main conveyor line.

Conspec Control monitors were tied to a central computer in the main office building, where alarming, trending, and historical storage takes place.

FINDINGS

Due to similarities with the Harrington facility, coal supply, and common owner-management structures, the results of the installations at Tolk and Harrington mirror one another in most respects.

Very little methane has been detected or even registered by the five monitors, although the methane sensor has an even lower detection threshold (approximately 0.05% by volume, or 500 ppm) Thus, when viewed as an early warning device for fire detection, it appears CO is a better and more reliable gas to base measurements upon.

Through use of Conspec Control's monitoring and control system, operators have mentioned several instances where increased CO readings have led to the detection of hot zones in bag houses and bunkers, thus enabling preventive action.

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