CASE STUDY

Soot to Solar

Wood River Power Station - East Alton, IL

The Wood River Power Station retired in 2016 after its owner, Dynegy-Vistra, deemed it no longer cost-effective to operate. The closing was relatively sudden: less than nine months elapsed between the company's (then Dynegy) announcement of retirement and the plant's closure (Dynegy 2015). (By comparison, in 2016 the Michigan utility DTE Energy announced the planned retirements of three coal plants more than four years ahead of their planned closure dates (DTE Energy 2016).) The plant now sits abandoned on the banks of the Mississippi River in the village of East Alton, Illinois, not far from St. Louis, Missouri.

The Wood River site remains dangerous, even with the plant retired. The site contains five coal ash storage ponds, which are rated as having a high probability of causing loss of life or substantial economic loss should the dam around the ponds fail (US EPA 2009). In addition, two of the ponds do not have liners, which are designed to prevent toxins from leeching into groundwater (Prairie Rivers Network n.d.). Dynegy-Vistra has acknowledged that it is legally obligated to clean up the ash ponds (Landis 2015), but that it has no plans to formally close them by either closure in place or removal of the coal ash (US EPA 2009). Community members have expressed concerns about what will become of the coal ash ponds and how they will affect the future use of the site.

Despite the danger on the Wood River site, there is also opportunity. Community members, and elected officials including East Alton Mayor Joe Silkwood (Cousins 2017), have expressed concern about a declining tax base and a need for economic development in the village. Solar energy could be a part of the picture: the Wood River site could accommodate a 46 megawatt solar farm as well as 10 megawatts of storage. The existing utility infrastructure on the site makes it more attractive as a solar farm from the perspective of interconnecting it with the grid, and the storage installation offers additional benefits including increased reliability and a reduced need for expensive, polluting gas-fired power plants (Jacobs 2017). The solar farm could take advantage of financial supports offered by the Future Energy Jobs Act, which was intended to bring solar energy to all parts of Illinois including rural communities like East Alton.

There's no magic bullet to justly transition a coal community. Mayor Silkwood rightly said that economic development is a "marathon, not a sprint" (Cousins 2017). But addressing hazardous coal ash ponds along America's mightiest river, while turning an old coal plant site into a solar farm generating clean energy and creating good jobs, could be a good start.



A freight train transports coal to the Wood River Power Station in East Alton, IL. [Photo Credit: Elizabeth Scrafford, Sierra Club]

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