Valuing the Montana Colstrip Electric Generators: A Strange New World

NorthWestern Energy is proposing to purchase the Montana hydroelectric generators originally owned by the Montana Power Company. Montana Power sold them off in the late 1990s as it pursued a speculative dream of becoming a national telecommunication company. Instead Montana Power went bankrupt and ceased to exist.

The hydroelectric generators, of course, are still here in Montana, humming away, producing electricity that is simply sold into the Pacific Northwest electric energy market by the new owners, Pennsvylania Power and Light’s Montana branch. PPL-Montana wants to geographically retrench and get out of Montana. So NorthWestern Energy, in an effort to rebuild the integrated utility on which Montana relied for almost a century, offered to purchase those hydroelectric facilities and rededicate them to Montana residents.

PPL-Montana’s initial response was no, you cannot buy just the hydroelectric facilities, but you can buy all of our electric facilities in Montana including our shares of Colstrip power plants One, Two, and Three. The Corrette coal-fired plant in Billings that PPL-Montana was planning to shut down next year was also included in the package.

NorthWestern Energy proceeded to submit a bid for all of PPL-Montana’s electric generating assets for $400 million dollars, but, then, also submitted another bid of $740 million dollars for only the hydroelectric generators.
NorthWestern ultimately entered into a purchase agreement for just those hydroelectric projects for $900 million. It is that $900 million hydro purchase agreement that the Montana Public Service Commission is currently evaluating.

The intriguing question that the Montana Public Service Commission is certainly asking is why NorthWestern would offer to pay $740 million for just the hydroelectric generators but only $400 million for a much larger set of generators that included the hydro units?

Depending on how you measure the productivity of these electric generators, the total package including both the coal-fired and hydroelectric generators was over 800 megawatts of generating capacity, three times as large and as 280 megawatts that the hydro facilities alone can provide. Yet Northwestern Energy offered to pay only about half as much to get generators with almost three times the production capacity as the hydro units have. What gives?

NorthWestern’s explanation is simple and straightforward: The future economic viability of coal-fired electric generation is very uncertain. The courts and EPA have been clamping down on the air emissions associated with older, dirtier coal-fired plants, insisting that very expensive air pollution controls be installed. In addition, with the U.S. Supreme Court’s approval, EPA has moved to regulate the emissions of greenhouse gases from coal-fired plants. Finally, EPA has just begun to regulate the toxic sludge produced by coal-fired generators that is stored in ponds that regularly leak and periodically fail catastrophically.
All of this makes the economic viability of coal-fired electric generators very uncertain. As a result, investors and electric utilities have largely stopped building coal-fired electric generators. Hard, cold, financial calculations indicated that these are not safe investments.

That is what NorthWestern Energy has told the Montana Public Services Commission: When the costs of cleaning up the pollution associated with PPL-Montana’s coal-fired facilities are included in the financial analysis, the financial value of those electric generators as a group is negative. That is, they have no economic value. They are a huge economic liability because of the future costs associated with them.

The Montana hydroelectric facilities, however, carry none of the environmental liabilities of the coal-fired generators. The hydro facilities generate electricity without using any fossil fuels and without releasing any greenhouse gases. Most of them have also recently undergone environmental review by the federal energy regulators and have been re-licensed for another 50-years of operation.

As a result, NorthWestern estimated the value of PPL-Montana’s coal-fired electric generators to be a negative $340 million dollars. When combined with NorthWestern’s estimate that the hydroelectric facilities were worth $740 million, the offer NorthWestern made for the whole package was only $400 million.

Of course, those who believe that the future of the Montana economy and the nation’s energy independence is tied to coal will find this NorthWestern
financial analysis outrageous. Of course many of these coal enthusiasts also do not believe that the combustions of fossil fuels cause global warming. The recognition of that potential greenhouse gas environmental liability associated with coal-fired generation in the financial analyses of many electric utilities and the same conclusions reached by Wall Street financial analysts is incomprehensible to coal boosters. It is seen as proof that the supposed federal “war on coal” has gotten out of hand and even infected Wall Street.

Alternatively, this hard-nosed financial analysis may help undermine the position of these ideologically-based flat-earth enthusiasts who insist we have to abandon science to have a future. The opposite, of course, is true. It is time to face up to the nearly irreversible damage we are doing to our atmosphere and begin making the rational adaptations in our energy use that we can before nature forces much more costly and disruptive adaptations upon us.