Not all "green" transmission lines are good for the environment.

E&E Daily reports on Thursday's hearing before the U.S. Senate Energy and Natural Resources Commitee discussing separate transmission siting and planning bills circulated by Senators Reid and Bingaman. Both would expand Federal siting authority and require regional planning for transmission lines intended to deliver renewable energy. The plans differ, however, when it comes to making sure the new lines actually deliver renewable power. Reid would require that 75 percent of the capacity of the new lines be dedicated to carrying power from renewable sources. Bingaman would place no limits on what the lines could carry.

"I am persuaded that we are on the right track in that regard by not trying to specify how much different kinds of energy get carried on the line," Senator Bingaman is reported to have commented. Senator Murkowski of Alaska is said to have added, "Energy security means transmission must be an asset for all of our resources."

All of this raises the question of why we might be interested in building transmission lines to carry renewable energy in the first place. Is it just to promote national security through energy diversity, or do we want to reduce carbon emissions, as well? If we want less carbon in the atmosphere, then we had better not simply expand transmission access for all comers.

Yes, there are promising locations for large-scale renewable energy development that are underserved by transmission. Some people, including David Morris of the Institute for Local Self-Reliance, make a compelling argument that as many as half the states could meet all of their energy needs with renewable energy from within their own borders. However, it is almost irrefutable that significant transmission expansion will be necessary to make a meaningful transition nationwide.

Here is the problem. Most renewable resources are intermittent, meaning that they are not likely to provide power more than 30 percent of the time. Even if a new line is entirely filled with power from renewable sources some of the time, it will be available to convey lots of carbon-laden coal and natural gas power most of the time. And constructing redundant or excessively large transmission lines will encourage that result. For this reason, even the Reid approach could lead to a substantial increase in carbon emissions. In its current form, the Bingaman proposal would not even try to mitigate that outcome.

What is needed is a new way of looking at transmission rights. We must construct lines that are restricted in their use to conveying power generated with renewable fuels. Otherwise, what looks like a step designed to reduce our depenedence on fossil fuels might actually make the environment worse. Finding a way to apply such a meaningful restriction on transmission access is a subject for another day.