

## **PRPA's Carbon-free Study a Laudable Endeavor**

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The residents of Fort Collins, Loveland, Longmont, and Estes Park have increasingly been calling for their municipal utilities to move toward providing 100% renewable electricity in order to do our part to address the climate crisis. These cities all receive electric power from the Platte River Power Authority (PRPA). In a “Viewpoints” column published on 8/20/17, PRPA CEO Jason Frisbie and PRPA Board Member and Fort Collins Mayor Wade Troxell describe how they are responding to these calls by embarking on an ambitious study of how the PRPA might deliver “100% (net) carbon-free” electricity to all four cities by 2030.

A group of clean energy advocates – including the two of us - recently met with Frisbie to learn more about the PRPA’s new initiative. We came away with a better understanding of what the study will entail, as well as some concerns that we hope will be addressed after the initial results are made available at the end of October.

Our first concern is that the initial study will not include utility scale energy storage. Such storage – which might include Lithium-ion batteries, thermal storage in molten salts, and pumped hydropower – is essential for a truly 100% renewable energy system, since the wind doesn’t always blow and the sun doesn’t always shine. Although the cost of storage technologies (especially batteries) continues to plummet, the PRPA does not recognize utility-scale storage as currently being viable.

Our second concern is that the study will include simulating the operation of natural gas-driven generators to back up proposed additional renewable energy sources instead of simulating the use of storage technologies. These generators could be existing relatively inefficient gas turbines and/or a new, more efficient combined cycle gas plant.

To compensate for the carbon dioxide emitted by the gas-driven generators, the PRPA is proposing to generate “excess” renewable energy, which would be sold on the open market in order to “net out” carbon emissions from the gas-driven generators to result in the goal of 100% (net) carbon-free electricity. While we would accept using existing gas turbines for a limited period until storage technologies become fully viable, we are opposed to investing in any significant new gas infrastructure as part of a net carbon-free energy plan.

Our third concern is the affordability of renewable electricity. As a non-profit public utility that is heavily reliant on coal, the PRPA has been able to keep electric rates relatively low. While wholesale costs for wind and solar energy have been declining rapidly, the PRPA points out that additional “integration, stabilization, and transmission” requirements could result in higher rates for renewables. This situation can be expected to improve over time because the cost of renewables continues to decline, which is not the case for fossil fuels. It may be necessary to explore financing mechanisms for bringing the long-term savings forward if renewables are to be cost-competitive with coal in the near term.

We believe that the concerns listed above can and should be addressed in the second phase of the PRPA’s study. Ultimately, we think that implementing the study’s recommendations will result in lower costs for electric service, cleaner air, and the elimination of millions of tons of CO2 emissions per year, to the benefit of the climate and future generations. We applaud the PRPA for embarking on this important endeavor.

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