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Renewable Energy (RE) Day NM at the Roundhouse Santa Fe, New Mexico, January 29, 2016

Clean Energy Ascendancy and New Mexico Rural Electric Cooperatives By William M. (Bill) Brown

Welcome, and thank you for spending your time with us today to learn more about renewable energy, and especially what is happening with renewable energy here in our immediate region.

In the Taos area, our rural electric cooperative, Kit Carson Electric, serves about 37,000 citizens. We pay about one hundred million dollars (\$100,000,000) each year for fossil-fuel energy services – coal, natural gas, propane, gasoline and diesel fuels. Nearly all of our money goes to fossil-fuel energy providers based in Texas, California, Colorado, Florida and other distant places. Almost none of our money stays home to build and sustain our struggling local economy.

Our citizens, knowing the promise in our vast local renewable energy resources, decided there are better ways forward. In 2012 we formed a non-profit organization that today is Renewable Taos, Inc. Our goal is a 100 percent renewable energy economy for north-central New Mexico. This means having 100 percent of *all* our energy demands for electricity, heating, cooking, and transportation served by renewables. We are approaching our goals in phases: renewables for electricity first, followed by renewables to offset natural gas and propane, and later reducing our gasoline and diesel demands by electrifying our transportation. These goals – once thought to be out of reach – today are realistic, economical, and attainable in a relatively short time.

Renewable Taos offers guidance, direction, and education for our political leaders, our rural electricity utility, and our citizens. We facilitate and advise, at all times pushing decisionmakers to do a better job creating our much needed renewable energy economy. We are non-partisan and less concerned about who gets the job done so long as it gets done. If Tri-State and PNM make the smart moves towards renewables to replace fossil fuel facilities, so much the better. If we can help Kit Carson Electric or private industry do the job, so much the better. Otherwise, we must look for new paths – more of which are opening with the economic superiority of renewables. The data continue to show the unsubsidized costs of utility-scale solar and wind energy today – and on into the future – are lower than costs of all other forms of energy generation.

At the the level of rural electrical cooperatives (RECs) there is little in the way of an immediate, rapid buildup of renewable energy generators. A Federal Energy Regulatory Commission (FERC) Order in 2015 says the obligation to purchase renewable power supersedes any conflicting provisions in the REC's requirements with Tri-State. The Order therefore allows our RECs to purchase substantial amounts of renewable energy from a nearby builder of, say, solar, wind or hydropower. The Order is based on the federal Public Utility Regulatory Policies Act of 1978 (PURPA). The Act was designed to enhance the buildup of renewables decades ago. Perhaps the Act was not widely employed over the years because of the cost of renewables being too high – but that is clearly no longer the case.

Further, power purchases and sales in a growing grid of interconnected renewables offer vast opportunities. Around the world, communities, cities, states and countries are using purchases from interconnected renewables to achieve 100% renewable electricity services. This is happening throughout the United States – especially for communities concerned about making a renewables transition in terms of their economic bottom lines.

Georgetown, TX – a rapidly growing city of about fifty-five thousand (55,000) near San Antonio – is targeting 100% renewables by 2017. Its model involves purchasing solar and wind energy from the interconnected grid in West Texas. The Georgetown mayor says, “...environmental zealots have not taken over our city council, and we’re not trying to make a statement about fracking or climate change. Our move to wind and solar is chiefly a business decision based on cost and price stability.”

In our Taos Valley, our electricity demand is lowest in the summer and highest in mid-winter. It is lowest during the day, and peaks in the early evening hours. Meanwhile, just to the east of our Sangre De Cristos, wind power peaks in the late afternoon and early evening. So we are looking at ways of generating solar energy in our Taos Valley to meet daytime demand and sell our excess to the Western Grid. As the sun goes down, we can purchase wind power to serve most of our early evening and nighttime demands. We can do this using contracts (PPAs) that lock in stable, predictable energy prices.

New Mexico RECs need to be taking similar approaches. A rapid buildup of renewables offers pricing favorable to customers as opposed to the volatile, unpredictable prices for fossil fuels. There are transmission interconnection challenges, but they are far from insurmountable. There are energy storage issues, but these are being steadily overcome. And the faster we scale up renewables, the faster transmission and storage issues disappear.

We are in a rapidly changing situation for renewable energy economics and policies. In just the past couple of years we have seen many encouraging opportunities and surprises come our way. For Renewable Taos, insurmountable obstacles facing us in 2012 today are simply nonexistent. The keys are to embrace change, be poised to seize opportunities as they come our way, and create the future we want.

Renewable Taos is pleased to share our story, our planning and our findings with anyone, especially the RECs throughout New Mexico. Please visit our web site, renewabletaos.org, and view our Renewable Taos Project documents. The ideas there, developed with our local and national partners, suggest many possibilities for a very real and clearly imminent 100% renewable energy future.

Thank You!

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