



June 26, 2015

Sonja Nowakowski Energy and Telecommunications Interim Committee PO Box 201706 Helena, MT 59620-1706

Dear Sonja;

This letter is provided in response to your request for information regarding NorthWestern Energy's ("NorthWestern") recent announcement regarding a \$3 Million investment in local renewable energy projects that was announced at the June 3, 2015 Bozeman Sustainable Energy Workshop.

The NorthWestern investments will be pilots designed to test and understand a number of distributed generation models on our system in their actual operating environments, including performance, benefits and costs.

Given the heightened level of interest across the country in various technologies including solar, and the continual pursuit of solar looking for a home on NorthWestern's system, including mandatory qualifying facility solar purchased power contracts, it is critical to develop and analyze the various aspect of distributed generation, including solar. NorthWestern needs to clearly understand the impacts of solar on various aspects of electric utility service, including distribution system reliability, energy storage capability, regulation backup requirements, energy capacity value, load factor, and capacity value. A critical component of course, is the related cost of solar and the impact it will have on all customer bills if rates are not designed appropriately. Cost effective solar and its related costs, is just one component of NorthWestern generation and deliver systems focus.

The City of Bozeman's commitment to sustainable growth includes a keen interest in managing the community's overall carbon footprint. NorthWestern Energy is helping the city to achieve its goals in several ways. First, the recent purchase of hydroelectric facilities in Montana provides residents with electricity that is mostly generated by wind and water. Secondly, the company is collaborating with the City and other interested residents on innovative solutions to use renewable energy to improve system reliability and/or add additional capacity. NorthWestern plans to invest up to \$1 million in a pilot project that will be further defined by a steering committee comprised of employees from NorthWestern Energy, the City of Bozeman and Montana State University – Bozeman. Details of that project will be announced when they are developed later in 2015. It's part of a larger commitment to invest up to \$3 million in renewable energy pilot projects in Montana. See the enclosed City Of Bozeman release regarding the project.

The Bozeman project is essentially a component of Community Generation Stakeholder process being initiated by NorthWestern, which is a reflection of NorthWestern's commitment to maintaining dialogue with customers about energy efficiency and sustainability issues that are important to them.

The Community Generation Stakeholder Group is the smaller of two new stakeholder initiatives. The larger and more critical effort will be the Infrastructure Stakeholder Group, which will help us address long-term end-to-end (transmission, substation, distribution; electric and natural gas)

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infrastructure needs on our system. That effort will build on the successful work of the earlier Distribution Stakeholder Group, which helped design NorthWestern's Distribution Infrastructure Stakeholder Plan (DSIP).

The Community Generation Stakeholder Group will help NorthWestern identify, design and implement very small local generation pilot projects on our distribution system. These could include, for example, combinations of solar generation and energy storage systems. The goals will be to understand the actual effects of these resources on our system including generation profiles, regulation requirements, as well as to identify applications where distributed generation, usually in combination with other tools could, for example, defer the need for other distribution investments, or increase reliability in certain parts of our network. Data from these efforts will assist with system planning, understanding the specific behaviors of the projects on our system, and will be made available to university engineering and research departments, the Interim Committee, and others. Depending on the projects, we expect that we may need to make one or more filings with the Montana PSC to establish the necessary service provisions and rates.

The stakeholder group will include persons with relevant expertise, including from academic engineering departments, and with operational experience. They will help us specify goals, measurements and specific projects

NorthWestern will invest up to \$3 million in the Bozeman and other projects identified by the stakeholder group. It is possible that others would make financial or in-kind contributions as well.

Hope this is helpful. We will keep you and the Energy and Telecommunications Interim Committee up to-date on our efforts as appropriate.

Sincerely,

Pat Corcoran

Vice-President Government and Regulatory Affairs

Corcoran

Enclosure



CITY OF BOZEMAN

Bozeman, Montana Office of the City Manager

NorthWestern Energy Announces \$3 Million Investment in Local Renewables at the Bozeman Sustainable Energy Workshop

For immediate release - June 17, 2015

On June 3rd, NorthWestern Energy, the City of Bozeman and the U.S. Department of Energy SunShot Solar Outreach Partnership joined together to sponsor and present the Bozeman Sustainable Energy Workshop at the Bozeman Public Library. Over 80 stakeholders participated in the workshop to discuss solar market trends, opportunities and obstacles, and the public policies that affect solar development in Montana.

The workshop kicked off with an announcement by Bob Rowe, CEO of NorthWestern Energy, and Jeff Krauss, City of Bozeman Mayor, that NorthWestern Energy plans to invest up to \$3 million dollars in distributed generation projects in Montana, with the first \$1 million to be invested in a project currently being designed by Montana State University, the City of Bozeman and NorthWestern Energy. That project will include solar and other distribution system technologies. The project will include a strong research component. The experience gained from this project will help NorthWestern Energy evaluate the feasibility of similar projects throughout their service territory.

Bozeman and NorthWestern leaders also discussed ways they can continue their work together in areas such as energy efficiency, supporting sustainable transportation infrastructure, and continuing to meet the Bozeman area's ongoing needs for adequate electric and natural gas infrastructure as the area continues to develop.

During the Bozeman workshop, NorthWestern Energy's leadership team discussed their diverse and low-carbon energy mix, where renewable hydro and wind make up 68 percent of the "nameplate capacity" and 56 percent of the actual generation. They also described the unique challenges presented by solar and wind energy to the electricity transmission and distribution system. Recognizing that utilities need to evolve with the growth of renewable energy, Curt Pohl, NorthWestern Energy's Vice President of Distribution, shared examples of solar battery storage and smart grid pilot projects already in progress around the state.

Julia Hamm, the Executive Director of the Solar Electric Power Association (SEPA), led a discussion on the broader U.S. solar market. She described the falling price of solar over the past five years and the rapidly expanding utility-scale solar market. SEPA presented alternative rate structures for Net Energy Metering customers, as well as approaches to community solar systems where customers can buy a share of the energy generated at a local solar development and receive a credit on their monthly bill for the energy generated.

As a next step, NorthWestern Energy plans to organize a state-wide stakeholder group to help develop its investment in the larger community generation pilot project. This effort is a complement to NorthWestern's ongoing planning and investment in its electric and natural gas infrastructure that is dedicated to serve Montana.

After the workshop, Mayor Jeff Krauss remarked, "The real news is how this day-long 80 person effort moves us on from the Legislature and into common ground on distributed solar. It's a start - with a big number."

Bob Rowe stated, "With support from Bozeman civic leaders and many others, we acquired the Montana hydro system and dedicated it to serve our Montana customers. That was transformational. Now we have the opportunity to build on that, both in our work on essential infrastructure and as we invest in new technologies in ways that make sense for all of our customers."