Our Power Grid Part 2, Local Considerations
Together We Build, February 22, 2023
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Two weeks ago, we wrote about the status of our national power grid in the USA, closing with the thought that "As we reinvest in our nation and our communities we need to recognize the power of many, combined, crowd sourced, each small action able to make huge differences when combined with those of others."

As we seek expertise regarding what steps the US needs to take to address our inadequate grid planning, both at the local level and the national level, we turn to a number of articles written by the Rocky Mountain Institute (RMI), a well-regarded independent, non-partisan, non-profit founded in 1982. RMI has the depth of expertise to help local communities understand how they can benefit from the Inflation Reduction Act (IRA). A recent article, "The Economic Tides Just Turned for States", goes into detail about the many economic opportunities the IRA has unlocked.

The Federal Energy Regulatory Commission (FERC) has announced the requirement that regional planning must be "sufficiently long-term and forward looking to meet transmission needs." The financial outlook needs to be longer term as well, to recognize the broad, diverse benefits of investment in transmission infrastructure. The article "The Best Time to Plan Transmission Was 15 Years Ago. The Second-Best Time Is Now" goes on to quote several knowledgeable sources suggesting that "transmission capacity needs to at least double and probably triple to decarbonize the entire US economy" and further calculates that "a fully renewable US power system would be about half as costly overall, if we roughly double transmission capacity within and between different US regions."

A major Achilles heel is inadequate planning. If grid planners were to coordinate their efforts with neighboring grids the cost and reliability would be greatly improved. The benefits of improved transmission, including economic benefits, weather resilience not to mention the substantial health benefits realized by reduced emissions, are often overlooked in the narrow focus of local and regional planning processes.

While FERC will require grid planners to consider long-term needs, the proposed rule will not require grid planners to consider "a broader set of benefits" for project selection, which we believe is bound to continue the narrow, short-term thinking currently practiced by regional grid planners. The problem of the lack of effective interregional transmission planning continues to plague efforts to move the broad benefits of improved transmission forward.

In the report "What Utility Regulators Need to Know about the IRA" RMI addresses the big question of HOW to ensure that we get the most out of the historic investment in our grid that the IRA makes possible. State utility regulators and local electric utilities represent a key element of success. There are some specific provisions, such as the Energy Infrastructure Reinvestment (EIR) Program, which expire in a few years. In order for states to fully benefit from the IRA the states will need to find ways to supercharge their timelines for completing projects. A local example of how long the process can take under "as usual" circumstances, the planning and implementation of moving the power lines that run next to Highway 36 has taken more than ten years to date.

Our local Estes Park Power and Communication (formerly Light and Power) needs to update their plans and utilize the benefits of the IRA to help us get to 100% clean energy by 2030. As we have ¼ ownership of Platte River Power Authority (PRPA), we should insist the PRPA immediately update their plans to better utilize financing and other provisions of the IRA to provide clean energy for the future while at the same time doing it at a lower cost to us, the stakeholders. To my knowledge our local utility has yet to invest directly in solar or renewable projects, not one single local project. The only local renewables project I am aware of to date, The Fall River Hydroelectric Plant, was built in 1908 by F.O. Stanley. Now is the time to invest in local renewables infrastructure, with the IRA's myriad tax and financial mechanisms. These incentives have the potential to alter the PRPA financial landscape by mitigating barriers to retiring uneconomical fossil fuels, such as PRPA's Craig Generating Station and the Rawhide Energy Station. Using lower cost solar and wind to generate clean hydrogen to provide back-up power is being encouraged by the IRA with investment tax credits which also incentivize stand-alone storage, should prompt our local PRPA and Estes Park Power and Communications utilities to reconsider the economics of new proposed gas, "Blue Hydrogen".

If one looks at the 2023 projected system total mix of energy sources on prpa.org/generation/, 56.8% is coal, 22.7% wind, 8.4% hydropower, 7.4% "other purchases", 2.5% natural gas and last and least 2.2% solar. However, this same page shows current generation of 431 MW generated by coal, 388 MW by natural gas, and 303 MW by wind.

The funding provided by the IRA reinforces the position promoting why the Town of Estes Park needs a new Renewable Energy manager to help capitalize on this funding. This manager could better coordinate renewable energy with the new state energy office, the new county position, and other town departments.

According to the above mentioned RMI "Economic Tides" article, Colorado stands to be able to secure 3.2k per capita in IRA funding, and $19 Billion cumulatively between now and 2030. Another calculator estimates Colorado could potentially induce as many as 23,000 new jobs through the IRA. The article includes a link for an Energy Policy Simulator which can be utilized to estimate the impacts of "hundreds of climate and energy policies".

As stated eloquently by RMI "What was once controversial — adopting ambitious climate and clean energy plans— is now about ensuring that the state isn't leaving economic development opportunities on the table." This is no time to drag our feet. The resources are there and we should run with them.

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Beck, Thomas W. "Our Power Grid Part 2, Local Considerations" *Estes Park Trail Gazette*, Friday February 24, 2023, https://www.eptrail.com/2023/02/24/our-power-grid-part-2-local-considerations/