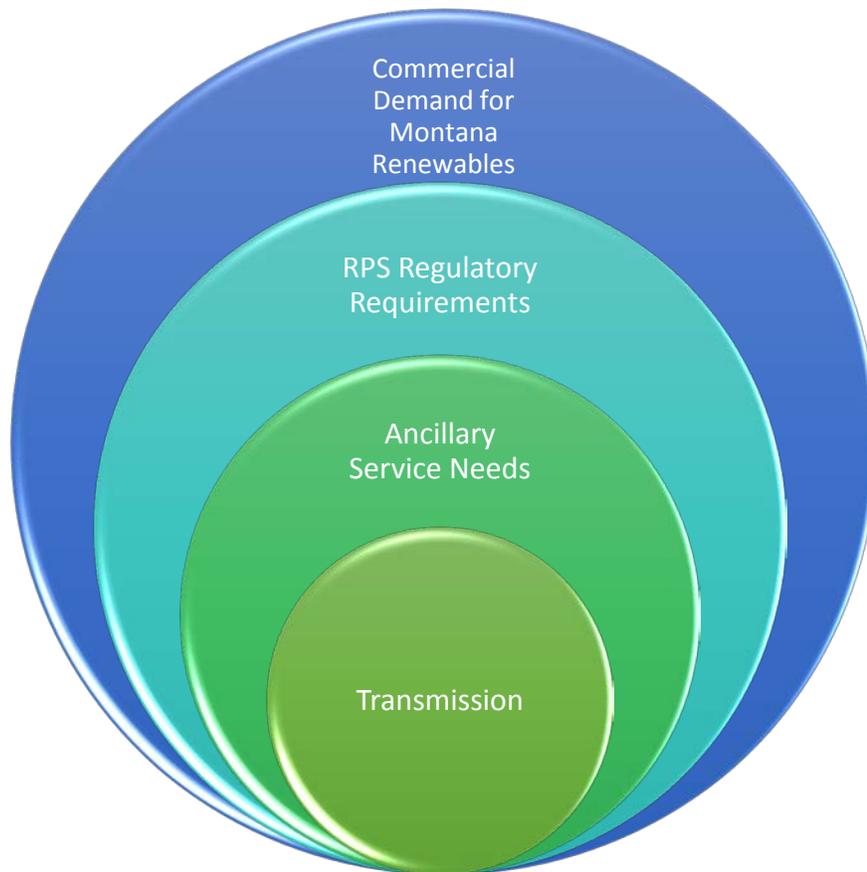


## **Montana Renewable Resource Development Action Plan**



The factors influencing the development of Montana's renewable resources are nested. Availability of transmission may be a starting point for the development landscape, but transmission rate treatment, working through the queues of the transmission providers, acquiring the ancillary products needed to move the energy to load, and the characteristics required to 'count' toward the Renewable Portfolio Standard requirements of the western states also affect their competitive profile and resulting commercial demand.

**The intent of this project is** to explore the physical and process opportunities and challenges facing Montana renewable resource development. This project arose from a diverse array of interested stakeholders with a mutual desire to explore the opportunities and challenges facing that development. The project's activities will culminate in an action plan to include an exploration of these nested issues, clarification of facts, and development of a range of potential solutions to each of the barriers identified. The project will conclude by June 30, 2018.

## **Issue Categories:**

### **Transmission**

#### Transmission Availability

Several factors affect the availability of transmission capacity that could be utilized to export additional energy out of Montana. The layout of the grid system results in energy developers needing to secure transmission from several asset owners to move energy from eastern Montana to west coast markets. For example, an energy generator may need transmission capacity over NorthWestern's assets, possibly the Colstrip Parties assets (Broadview to Townsend), the BPA assets, and potentially other owners in Washington or Oregon.

The development action plan under discussion will look at the available transmission capacity across these multiple owners to determine the amount that is currently available. In addition the process will examine where bottlenecks occur and what options might be available to ease them.

Multiple owners also result in multiple rates or tariffs paid to access the grid system. The development action plan will attempt to delineate these costs and examine the impacts of multiple rates.

When generators connect to the grid, certain protocols, communications, and tripping equipment (in aggregate referred to a Remedial Action Schemes or RAS) are needed to assure that when needed, the grid can be isolated from generators. This allows for protection and repair of the grid. The development action plan will discuss and start or identify the process needed to assure adequate RAS.

### **Ancillary Services**

#### Dynamic Transfer Capability (DTC) & Flexible Capacity Requirements

Integration of new variable resources requires special services known as Ancillary Services to move energy across the transmission grid and maintain grid stability. Grid operators must maintain the balance between energy injected into the grid and energy extracted from grid. The development action plan will look at who can provide these services to energy developers in Montana.

Balancing energy requires careful scheduling of energy injection, plus access to on demand energy capacity that can be used to balance the system when scheduling errors occur.

There are options called Dynamic Transfer Capability that allow generation assets located in one balancing area, or Balancing Authority (BA) to receive ancillary services from a different BA. NorthWestern has reported that their ability to provide ancillary services may be limited and thus the development action plan will examine the DTC and Flexible Capacity requirements needed to allow more energy export from Montana.

## **Regulatory Requirements**

Washington State's Renewable Portfolio Standards (RPS) have certain limitations on resources from outside Balancing Authorities in Washington. DTC will be examined to see if renewable resources developed in Montana will qualify under Washington's RPS.

The development action plan will also examine what might be needed to integrate Montana renewables in a way that qualifies for RPS certification in Oregon and California.

Production Tax Credits (PTC) expiration will be reviewed to see their effect on developer investment timing and ability to meet utility solicitation bids.

Other potential regulatory constraints will also be identified.

## **Commercial Viability**

Any additional development of Montana energy resources will require projects to be commercially viable. Besides the issues noted above, the development action plan will strive to articulate any other barriers that might exist.

Financial competitiveness and market demand will be important considerations. Besides west coast markets, the plan will discuss local markets plus north bound or south bound markets.

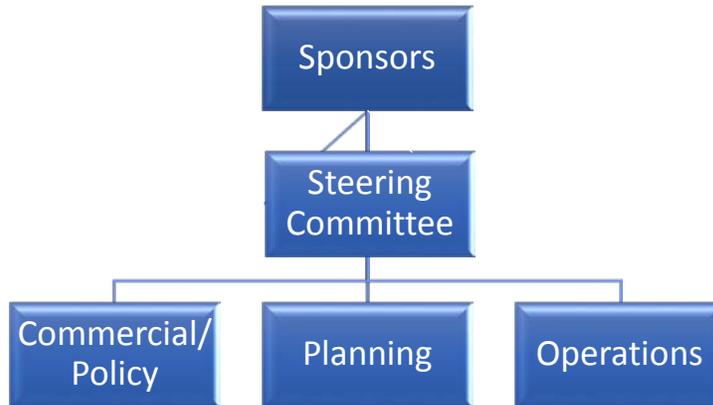
## **Project Structure**

The project is sponsored by Montana Governor Steve Bullock and BPA Administrator Elliot Mainzer. It will be organized in a structure of 3 working committees guided by a steering committee. The work will address (1) commercial/policy, (2) planning, and (3) operational issues. Each of the issues identified earlier will be assigned to one primary committee, but these committees will coordinate with the others as appropriate.

BPA will maintain an external website for this project containing this action plan, notices, meeting agendas, and other materials. All committee, subcommittee and working group meetings will be noticed on the website and open to the public. BPA and the State of Montana will facilitate the development of meeting agendas with other participants.

The development action plan will strive to identify and articulate all issues that need resolved to facilitate increased energy export from Montana. Where obvious pragmatic solutions exist they will be articulated as well. For more difficult issues, the action plan will suggest steps towards finding resolutions.

Any decision, option or recommendation developed in this process regarding BPA will likely be subject to another subsequent process, such as a BPA rate case, tariff filing or policy process before it may be adopted.



Steering Committee:

1. Jeff Cook, BPA
2. Mike Cashell, NWE
3. David Mills, PSE
4. Larry Bekkedahl, PGE
5. Rachel Shimshak, Renewables NW
6. Chuck McGraw, NRDC
7. Travis Kavulla, Montana PUC
8. Gov Inslee's office?
9. WUTC
10. OPUC
11. Bill Pascoe, representing Orion Renewables
12. Tim Baker, Montana Governor's Office, NWPPC
13. Joe Lukas, Montana G&T
14. Scott Corwin, PPC
15. Johnny Casana, Pattern
16. Carl Borgquist, Absaroka Energy
17. Michael Cressner, Orion Renewables
18. Avista
19. Jason Smith, Montana Governor's Office of Indian Affairs (ex officio)

Commercial/Policy Committee: Lead and Co-Lead? Altman

- Brian Altman, BPA
- Andrew McLain? - NWE
- Cameron Yourkowski, Renewables NW
- ....

Planning Committee: Lead and Co-Lead?

Pat Rochelle, BPA

Chelsea Loomis? - NWE

Patrick Damiano, ColumbiaGrid

.....

Operations Committee: Lead and Co-Lead?

Bart McManus, BPA

NWE

PSE

PGE

Ken Neal, NaturEner

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