

Case No. PAC-E-21-07
Exhibit No. 24
Witness: Richard A. Vail

BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION

ROCKY MOUNTAIN POWER

Exhibit Accompanying Direct Testimony of Richard A. Vail

Aeolus to Bridger Anticline

May 2021

Energy Vision 2020 Wind Network Improvements

D.2 Project Facilities:

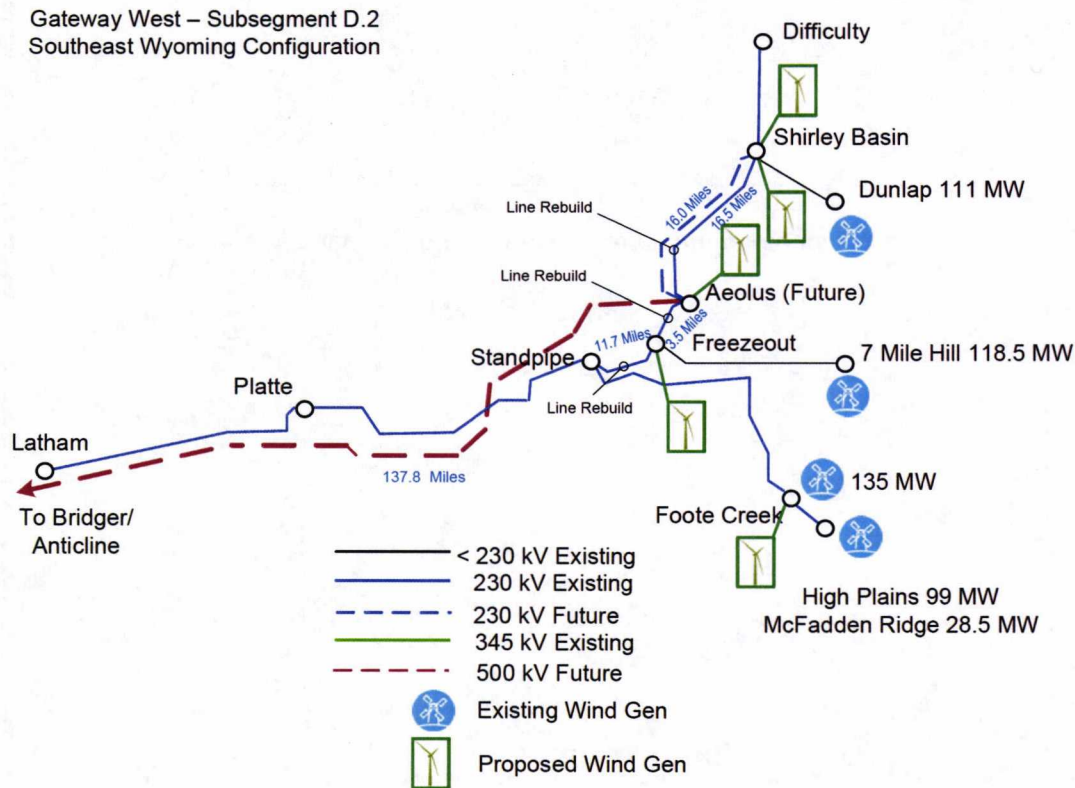
D.2 Project Transmission Facilities:

- Addition of the Aeolus 500/230 kV autotransformer
- Addition of the Aeolus – Anticline 500 kV line (~138 miles)
- Addition of the Anticline 500/345 kV autotransformer
- Addition of the Anticline – Bridger 345 kV line (5 miles)

Southeast Wyoming – Network Upgrades

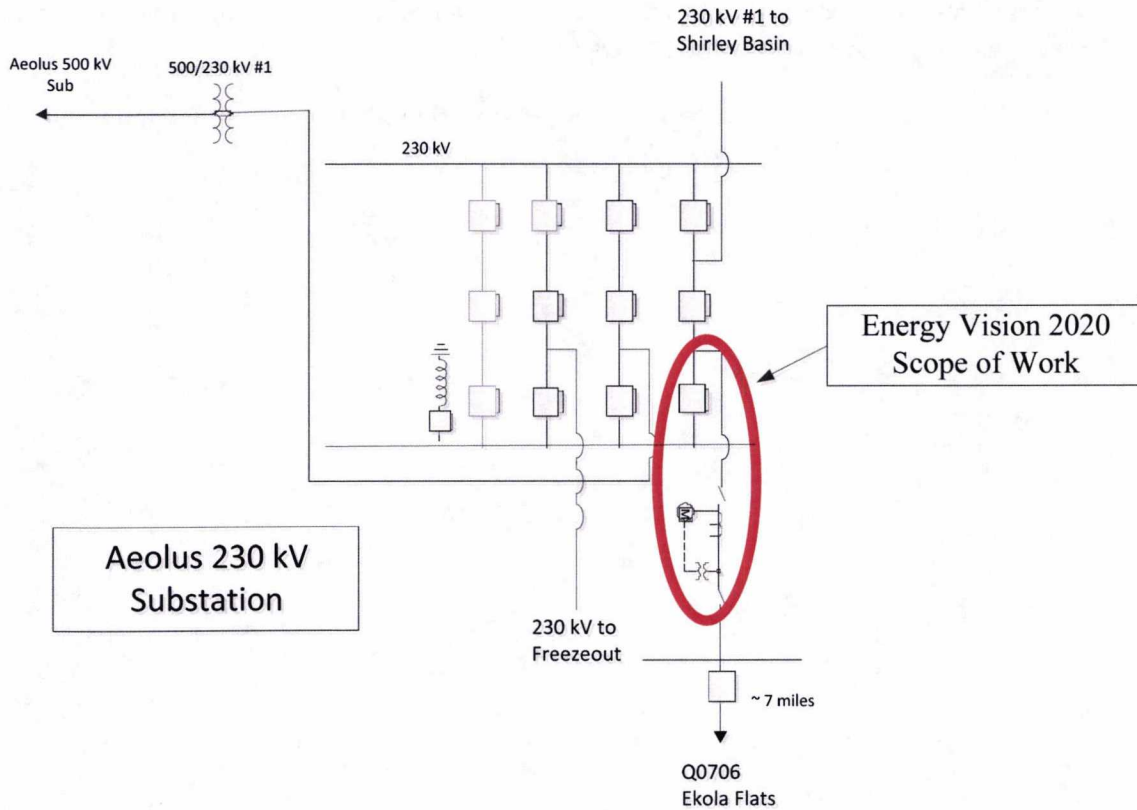
- Loop the Shirley Basin – Freezeout 230 kV line into Aeolus 230 kV
- Add the Aeolus – Shirley Basin 230 kV #2 line (~16 miles) [Q0707]
- Rebuild the Aeolus – Shirley Basin 230 kV #1 line (~16 miles) [Q0712]
- Rebuild the Aeolus – Freezeout - Standpipe 230 kV line (~15 miles) [Q0712]
- Add Latham SVC

A drawing depicting all new D.2 Project network transmission facilities east of Jim Bridger Power Plant is provided below:



At the Aeolus substation to support the Ekola Flats wind project the following network upgrades are required:

- Add one (1) 230 kV 4000 ampere circuit breaker and one line position with associated switches.
- Include the project in the Aeolus RAS generation dropping scheme.



At Shirley Basin substation to support the inclusion of TB Flats I wind projects, the following network upgrades are required:

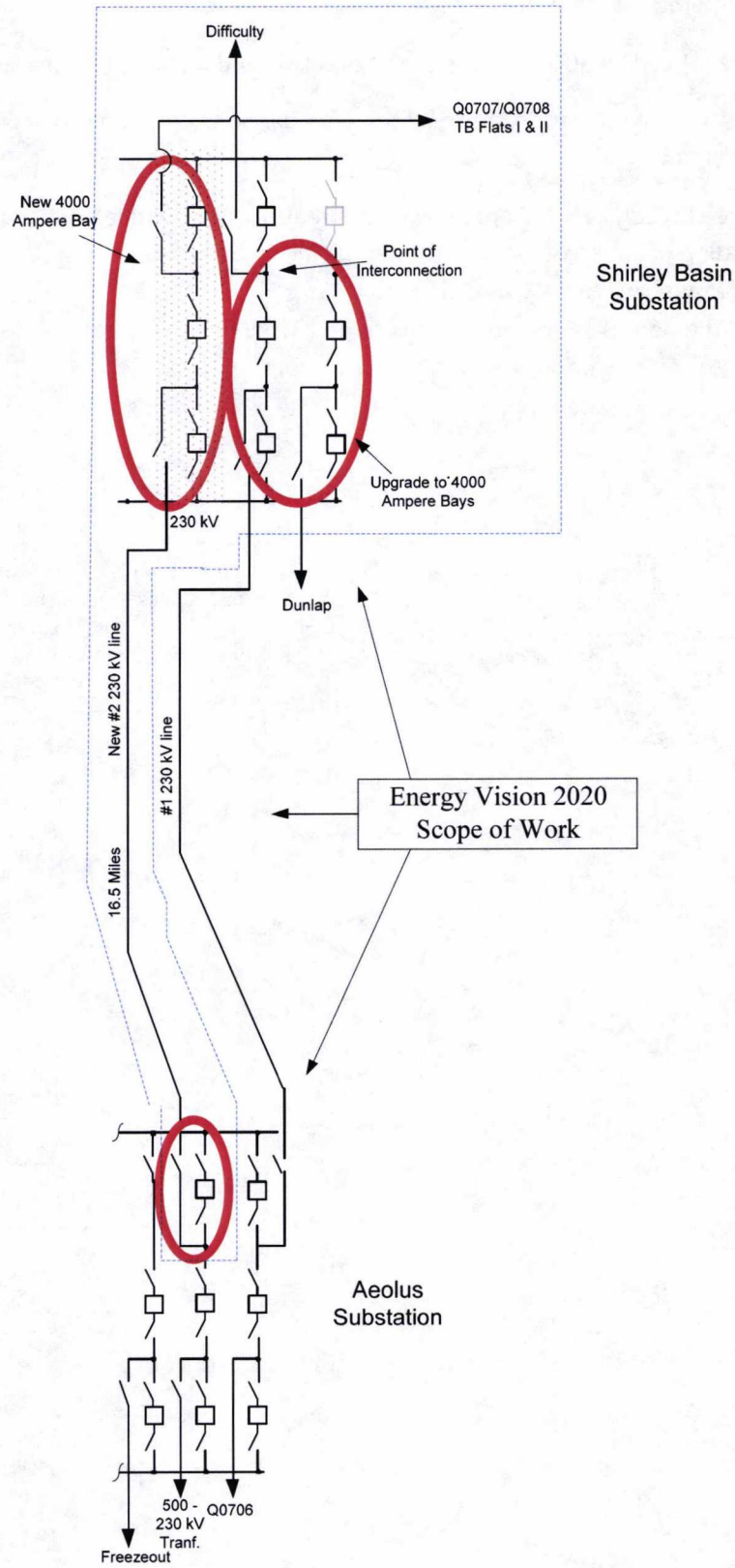
- Add one new bay and rebuild existing bays to 4000 amperes, seven (7) new 4000 ampere 230 kV circuit breakers, two line terminations with associated switches
- Construct a new approximately 16.5-mile Shirley Basin – Aeolus 230 kV #2 line.

At Aeolus substation the following network improvements are required:

- Add one (1) new 4000 ampere 230 kV circuit breaker, one line termination and associated switches
- Include the project in the Aeolus RAS generation dropping scheme.

The TB Flats I and II were combined into a single point of interconnection. As such, to support inclusion of the TB Flats II wind the following network upgrades are required:

- Include the project in the Aeolus RAS generation dropping scheme.

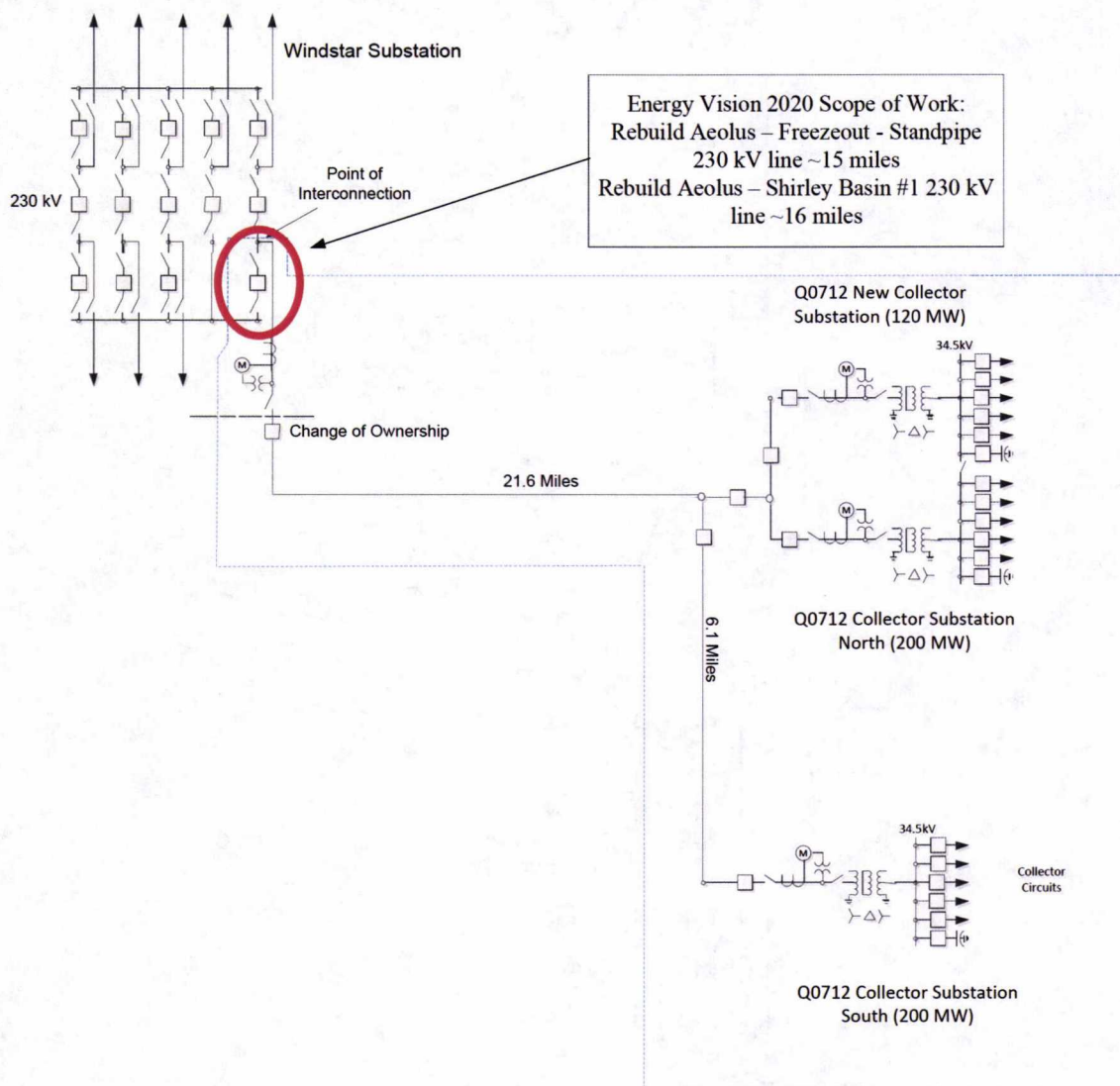


At Windstar substation to support the inclusion of Cedar Springs I wind project the following network upgrades are required:

- Add one (1) 230 kV 3000 ampere circuit breakers and one line termination

At Freezeout substation to support the inclusion of Cedar Springs I wind project the following network upgrades are required:

- Add three (3) 230 kV 4000 ampere circuit breakers along with associated switches for re-termination of lines associated with the Aeolus-Freezeout-Standpipe 230 kV line rebuild
- Upgrade two bays to 4000 amperes
- Rebuild the Aeolus – Freezeout – Standpipe 230 kV line ~15 miles
- Rebuild the Shirley Basin – Aeolus 230 kV #1 line ~16 miles



Freezeout 230 kV

