Wyoming Public Safety Communications Commission Business Meeting Packet



Videoconference Business Meeting Held Monday, May 8, 2023





Wyoming Public Safety Communications Commission



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Agenda

Monday, May 8, 2023 at 11:30 a.m.

I. CALL TO ORDER II. PLEDGE OF ALLEGIANCE III. **ROLL CALL INTRODUCTIONS** IV. V. CHANGES/ADDITIONS TO AGENDA (Tab 1) VI. **ACTION ITEMS** Consideration of the Expenditure of ARPA Funds for the WyoLink System (Tab 2) VII. **A**DJOURNMENT

ARPA - MICROWAVE UPDATE FOR PSCC

To best meet the functional and operational specifications of the Wyoming Department of Transportation's (WYDOT) WyoLink system backhaul, Motorola's solution includes a combination of hardware, software, and services. Specifically, this solution covers the replacement of existing circuit based microwave infrastructure for the 19 existing DS1 and 8 DS3 microwave links with Ethernet microwave links. The proposal also includes SAR-8 routers at the majority of the remaining microwave sites for MPLS routing.

Most of the proposed locations will utilize six-foot high performance microwave antennas, while eight-foot high performance dishes are employed at some locations to achieve target performance requirements. New dish mounting hardware, E65 waveguide, ice shields (only included for dishes located below the top of the tower), and wall-mounted dehydrators are included to support the implementation at each location.

All of the new links are designed to operate at a minimum of five-nines (99.99986%) availability, with the vast majority projected to operate at six-nines (99.9999%) of availability.

Path and site surveys will be performed prior to the implementation of each of the proposed links. This process will verify the accuracy of the preliminary path designs while ensuring that the path is free of any physical obstructions that may not have been included in the design software's clutter dataset. FCC coordination and licensing services are also included to support the implementation of each link.

A complete tower appurtenance mapping will be performed in order to develop a structural analysis for existing structures. The installation of the new equipment will be included as part of the analysis in order to determine that the tower can safely handle the new equipment loading.

Each installed microwave link will then be field tested to ensure proper operation. A subsequent ITU-T Y.1564 Ethernet service verification test will also be performed to validate the implementation.



