

Wyoming's Statewide Public-Safety Interoperable Radio Communications Systems

Project Manager's Report to the PSCC

Date: June 13, 2006

Mr. Chairman,

I always like being the bearer of good news. I am pleased to report that development of WyoLink infrastructure is progressing on all fronts. It is fair to say that we can see the light at the end of the tunnel. We are not there yet, but at least we can see what it will take to get there.

INFRASTRUCTURE DEVELOPMENT

It took 17 months for the WyoLink infrastructure development project to move from contract signing to Pilot Phase completion. The first project meeting took place in November of 2004. The final milestone of the Pilot Phase was accepted on March 31, 2006.

The goal remains to have WyoLink operating statewide by the end of 2007. Presently work on the next three phases and the second zone controller is underway. Work will accelerate based on the process adjustments and lessons learned during the Pilot Phase. With the resources in hand, I believe the commitment to statewide operation by the end of next year will be met.

Design work for the second zone controller, which will be installed at the Casper Port of Entry facility, is mostly complete. Final design review is anticipated in the coming weeks. Installation of the building and all electronics will occur before the end of the year. (If you will be passing through Casper on your way home from this meeting you may observe a new monopole type tower standing on the east side of the POE property.)

The balance of the WyoLink infrastructure development will involve getting radio sites on the air. I have attached the system map with symbols added to illustrate the status of radio site development.

A green star marks the 5 Pilot Phase sites that are currently on the air and offering widearea trunking.

A blue diamond marks the Phase-2 sites. The sites are ready for WyoLink installation. All design work for these sites has been completed. The antennas and radio equipment have been ordered. Installation work is already underway and will continue during the summer. *Note: the RF combining equipment for these sites cannot be ordered until the final frequency plans are assembled. These sites will be built during the summer they will be optimized and put into service when the frequency plans are completed in the fall.*

A yellow triangle marks the 9 Phase-3 sites. Site civil development work — upgrade of buildings and towers — will be taking place this summer at the sites. The WyoLink site design work is underway. The WyoLink project team will be working closely with the civil development contractor to coordinate development of these sites. WyoLink installation at

the sites is anticipated in late summer or early fall. Optimization of these sites could occur in the fall of 2006, if circumstances cooperate.

A pink square marks the 10 Phase-4 sites. Site civil development work on the sites has not yet begun. To expedite WyoLink development, the project team will be evaluating a turnkey installation proposal from Motorola for these sites. While the cost of this accelerated effort is not yet in hand, it will be addressed within the current budget. These sites are anticipated to be on the air during 2007.



A lightning bolt marks those sites that are currently considered Phase-5. These are radio sites on federal land for which site access agreements are not yet complete. Where the lightning bolt is <u>red</u>, the process is still to be initiated. Where the lightning bolt is <u>yellow</u>, the process is underway with the WyDOT Right-of-Way actively working on the site acquisition.

- Note: The 2 sites marked "M/W" {Rendezvous and McCullough Peaks} are microwave-only locations. Development of these sites is essential to WyoLink functionality.
- Note: The 2 sites that are not marked with a symbol {3-Mile and Cedar Ridge} are under review in terms of their coverage contribution to statewide mobile radio coverage.

Further, this map also depicts the projected mobile-radio coverage based on preliminary design data. Four areas of coverage deficiency may be observed:

- (1) <u>Yellowstone National Park.</u> This area was not addressed in the PSMC plan and will only be addressed in response to and through federal participation.
- (2) <u>Southwestern portion of Park County</u>. This coverage area is a challenge due to limited site availability and access. The primary operational need is to cover the east entrance to Yellowstone.
- (3) <u>The Bighorn Mountains including the Burgess Junction area</u>. Use of Black Mountain Lookout is being evaluated. This site would provide significant coverage in the Bighorn Mountains. The site has radio facilities but would require the installation of a power line and other site upgrades.
- (4) The southern part of the Snowy Range including segments of Highway 230.

Note: We are researching existing or new radio sites to address these coverage deficiencies, though not as a primary project task; suggestions are welcome. Possible sites are not factored into current frequency planning efforts. Rigorous efforts to fill these coverage gaps may take place after the core WyoLink system is operational statewide.

FREQUENCY PLANNING

Motorola reports the frequency engineering effort is on schedule. As previously reported, a list of unlicensed frequencies has been compiled. Since that report, regulatory contours for all of WyoLink sites and adjacent sites have been calculated. That information allows the engineers to analyze the interrelationship between adjoining radio sites. Based on that data, a clean list of available frequencies has been compiled. At this point, an initial frequency plan is beginning to take shape. Delivery of that planning milestone is anticipated in July. Additional, site-specific, evaluations will follow. Delivery of the final frequency plan is anticipated in September. FCC application processes will follow, with the goal of completing the entire frequency planning and licensing process by the end of the year.

