

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554**

Enterprise Wireless Alliance and Pacific)
DataVision, Inc. Petition for Rulemaking) RM-11738
Regarding Realignment of 900 MHz Spectrum)

**COMMENTS OF SALT RIVER PROJECT AGRICULTURAL IMPROVEMENT AND
POWER DISTRICT**

Pursuant to Section 1.405 of the Commission’s Rules, Salt River Project Agricultural Improvement and Power District (SRP) hereby files its comments in response to the Commission’s Public Notice in the above-referenced proceeding.¹ SRP recommends the following revisions to the supplemental submission by the Enterprise Wireless Alliance and Pacific DataVision.² The process for the proposed realignment of the band should provide licensees with sufficient notice and an opportunity to negotiate to participate in the Private Enterprise Broadband (PEBB) or to relocate into the narrowband allocation. Similarly, there must be more than one “realignment manager” to better ensure fairness in the process. Interference protection and compensation should be available to incumbent licensees who operate anywhere in the 900 MHz band, not just those incumbent licensees that relocate from the PEBB allocation to the narrowband allocation. The interference threshold should be set at a lower level than -88 dbm; and there needs to be a guard band to protect narrowband operations below 937 MHz and above 940 MHz. Incumbent licensees who are relocated below 937 MHz need to be provided comparable facilities that are equal or better in terms of cost, quality,

¹ Wireless Telecommunications Bureau Seeks Comment on Supplement to Enterprise Wireless Alliance and Pacific DataVision, Inc. Petition for Rulemaking Regarding Realignment of 900 MHz Spectrum, Public Notice, RM-11738 (rel. May 13, 2015)(hereinafter “Public Notice”).

² Realignment of the 896-901/935-940 MHz Band to Create a Private Enterprise Broadband Allocation, Petition for Rulemaking of the Enterprise Wireless Alliance and Pacific DataVision, Inc., RM-11738, Proposed Rules, filed May 3, 2015 (hereinafter “supplemental submission”).

reliability and resiliency – and costs need to account for all additional ongoing operational and capital expenses -- with no cut-off of reimbursement after a certain time period. Finally, a cost-benefit analysis of the proposed realignment should be developed at the outset that includes the estimated cost of relocation of incumbents and the cost of constructing, operating and maintaining the PEBB in each MTA based upon a proposed set of standards for coverage, reliability and resiliency.

I. Introduction

SRP provides electric, and water utility services to over 3 million people in the Phoenix, Arizona metropolitan area. SRP has a land mobile system in the 900 MHz band. This is a digital Trunked Radio system serving the majority of two counties and is used for critical dispatch services for electric and water operations and maintenance personnel. The proposed changes will directly affect SRP's radio system which is operating entirely within the section of the spectrum proposed to be consolidated into contiguous 3 MHz blocks. Within that existing block we are currently able to roughly maintain minimum channel spacings to allow low loss transmitter antenna combining. This is essential for maintaining signal levels required for good portable handheld radio coverage in our territory. This coverage is required for safety of life of our personnel who operate the electric system in the field and require accurate and timely information in order to do so safely and reliably.

The supplemental submission proposes technical rules for operation in the broadband segment, such as emission mask and antenna height and power limits. The supplemental submission also proposes rules for the proposed relocation process that is similar to the procedure that the Commission adopted in the 800 MHz proceeding. Finally, the supplemental submission proposes rules for the conditions under which the PEBB licensee would offer broadband arrangements to requesting entities, and the interference protection that the PEBB licensee must provide to systems operating in the 901-902/940-941 MHz band. Collectively, these rules are critical to ensuring that the proposed realignment of the 900 MHz band is conducted in a way that promotes the use of the band for the PEBB and at the same time ensures that

incumbent licensees are protected from interference and are made whole for their capital and ongoing operational costs incurred as a result of the construction, operation and maintenance of the PEBB. Therefore, SRP is pleased to provide the following comments in response to the FCC's Public Notice regarding the supplemental submission.

II. Process Issues With the Realignment of the 900 MHz Band and the Relocation of Incumbent Licensees.

SRP is concerned that the realignment process does not provide adequate notice and opportunity for the entities to participate. It is very likely licensees will miss a public notice. Even if they do see the public notice, 30-days may not be sufficient time for them to decide if they want to participate in the negotiations to become part of the PEBB. Moreover, SRP observes that the entire process is predicated upon the Commission issuing the public notices "as soon as practicable", which underscores the impression that this process is accelerated to the point that incumbent licensees will not have adequate time to prepare and respond, including filing comments within the 30 day window provided under the proposed rules. As such, SRP urges the Commission to consider providing supplementary forms of notice in addition to public notices and to provide longer periods for incumbent licensees to respond to the notices.

SRP is also concerned that the negotiation process and the relocation process need to be fairer to incumbent licensees. While the proposed negotiation process is based on the 800 MHz re-banding process, SRP submits that the 800 MHz re-banding process has taken much longer than was expected and that the 900 MHz band may be more complicated than the 800 MHz re-banding process. Complicating factors include the fact that the 800 MHz transmit channels are grouped with 1 MHz separation for up to 5 channels. This allows for very low loss cavity combining for transmit antennas. The 900 MHz band is licensed on 12.5 kHz channels with transmitters 12.5 KHz apart. This requires very high loss hybrid combining allowing only very low ERP levels and necessitating more transmit sites for comparable coverage. With current access to channels in the entire 5 MHz band, incumbent users can get the required 500 KHz transmitter spacing for up to 7 channels at a site. But with only 2 MHz to choose from, that

number drops to 2 to 3 maximum properly separated channels at one site. It becomes apparent that this band change will compromise existing system operation and guaranteeing equivalent system operation in this band after re-alignment may not even be possible for incumbent systems larger than a small handful of channels at any one site, especially with the congestion already in place in urban areas. Moreover, the exigencies of 800 MHz interference that underscored the need to accelerate the re-banding process are not present here in the 900 MHz band. Quite the opposite, there are greater concerns that re-banding the 900 MHz band to support the PEBB will *cause* interference, not relieve it. As such, SRP urges the Commission to proceed with caution and not rush the relocation process.

The voluntary and mandatory negotiation processes should be longer than one-year, and licensees should not be forced to relocate if they can't agree on comparable facilities or costs. SRP has concerns about the length of the mandatory negotiation period. It needs to be at least two years, consistent with the FCC's rules for the PCS and MSS relocation in the 2 GHz bands. Similarly, SRP has serious concerns about a process that would force incumbents to relocate involuntarily. This should be a last resort and only invoked if there is bad faith that leads to failed negotiation. If it is invoked, there should be minimum costs specified that must be covered. Right now, there are no minimum costs that are covered. Finally, if a licensee fails to respond to a request to initiate voluntary negotiations, the licensee should not be forced to go immediately to mandatory negotiations; they should have an opportunity to cure and enter into voluntary negotiations.

Finally, there needs to be more than a single realignment manager to coordinate the realignment, otherwise incumbent licensees will be at risk of recommendations that would tip the balance in the favor of the PEBB. SRP reiterates its opposition to designating EWA as the single realignment manager. Instead, the Commission should certify multiple coordinators from among the existing pool of authorized frequency advisory committees who are certified by the Commission to coordinate Part 90 operations.

III. Comparable Facilities and Reimbursement of Costs

SRP is concerned that the proposed rules would only provide reimbursement for comparable facilities for relocation of incumbent licensees in the PEBB allocation; the rules would not provide

reimbursement for comparable facilities to incumbent licensees who operate outside of the PEBB allocation and who are also affected by interference from PEBB operations, such that they must modify their systems as well. SRP is also concerned that the proposed rules would cut off any reimbursement for increased operating costs after five years from the date of relocation. Finally, SRP is concerned that interference protection should be fully guaranteed to incumbent licensees who continue to operate in the PEBB allocation, when the PEBB is unable to provide them with comparable facilities. They should not be merely provided “appropriate” interference protection. As such, SRP urges the Commission to ensure that all incumbent licensees are made completely whole, such that any incumbent in the 900 MHz band should be reimbursed for their comparable facilities costs that are required due to PEBB operations, including any ongoing increased operating costs -- without restrictions on the duration of the obligation of the PEBB licensee to cover those costs.

IV. PEBB Network Design Characteristics, Cost and Priority Access for CII

SRP believes that there needs to be greater certainty about how the PEBB is going to be designed, constructed, operated and maintained; and utilities and other CII need greater certainty about the level of priority access that would be provided, particularly during emergencies. The allocation of the cost of coverage, reliability and resiliency, including network hardening need to be better understood in order for the cost-benefit analysis to be conducted about whether the realignment of the band is in the public interest. As such, SRP reiterates its earlier suggestion that an estimate should be conducted of the potential costs of the PEBB network, considering factors such as coverage, site hardening and sustainability, scalability, adaptability and security, as well as other factors. This estimate should also consider the cost of relocating incumbents within the band in order to accommodate the PEBB allocation. Likewise, SRP believes that priority access should be a condition of the PEBB license and that it should be better defined to make it truly enforceable. As such, the Commission should require that more information be provided about the cost and quality of the network, rather than to merely rely on the parties to negotiate the scope and terms of the contract.

V. Interference Protection from PEBB Operations

SRP is concerned that the proposed interference standard thresholds and minimum receiver standards do not sufficiently protect utility and CII operations. Utility systems are designed for portable coverage down to the level of -119 dBm and signals at that level still produce good usable audio. The proposed rules indicate that interference is not considered interference unless the incumbent user's receiver is currently receiving a DESIRED signal strength of -88 dBm. This is in effect a new interference threshold determined by PDV. This proposed cut-off of -88 dBm is not even close to a reasonable minimum threshold that would be sufficient to adequately protect incumbent licensees against interference from the PEBB licensee. SRP urges the Commission to make the interference protection standards more stringent by lowering the level to at least -119 dBm which is the effective sensitivity of the incumbent user's receivers. Standard narrowband radio systems are designed in a noise-limited fashion. In order to have adequate handheld coverage with a small number of high site base stations, these systems must operate right down to the noise floor. PDV's arbitrary suggestion of -88 dBm effectively raises the noise floor in our systems by over 30 dB. SRP cannot operate our systems in that environment.

Conclusion

In conclusion, the process for the proposed realignment of the band should provide licensees with sufficient notice and an opportunity to negotiate to participate in the PEBB or to relocate into the narrowband allocation. Similarly, there must be more than one "realignment manager" to better ensure fairness in the process. Interference protection and compensation should be available to incumbent licensees who operate anywhere in the 900 MHz band, not just those incumbent licensees that relocate from the PEBB allocation to the narrowband allocation. The interference threshold should be set at a lower level than -88 dbm; and there needs to be a guard band inside the 3 MHz band allocation to protect narrowband operations below 937 MHz and above 940 MHz. Incumbent licensees who are relocated below 937 MHz need to be provided comparable facilities that are equal or better in terms of cost, quality, reliability and resiliency – and costs need to account for both all additional ongoing operational and

capital expenses with no limit on the time period. Finally, a cost-benefit analysis of the proposed realignment should be developed at the outset that includes the estimated cost of relocation of incumbents and the cost of constructing, operating and maintaining the PEBB in each MTA based upon a proposed set of standards for coverage, reliability and resiliency.

Respectfully submitted,

**SALT RIVER PROJECT AGRICULTURAL
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