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March 6, 2014

Via Electronic Comment Filing System

Ms. Marlene H. Dortch
Federal Communications Commission
Office of the Secretary
445 12th Street, SW
Washington, DC 20554

Re: WC Docket No. 10-90 –Expression of Interest in Conducting Rural Broadband Experiment

Dear Ms. Dortch:

Enclosed for electronic filing via the Electronic Comment Filing System ("ECFS") in compliance with Federal Communications ("FCC") Order, FCC 14-5, is the attached non-binding Expression of Interest ("EOI") for Monarc Technologies, ("Monarc") regarding the Connect America Phase II network experiments. Monarc appreciates the opportunity to file the non-binding EOI.

If you have any questions or concerns on the attached EOI, please contact me.

Respectfully Submitted,

A handwritten signature in cursive script that reads "Sheila Griffin".

Sheila Griffin
General Manager
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(712) 689-2238

Attachments (Non-binding EOI)

Non-Binding Expression of Interest – Phase II Rural Broadband Experiment

Monarc Technologies, ("Monarc") submits this Expression of Interest ("EOI") for Connect America Phase II Rural Broadband Experiments per Federal Communications Commission ("FCC") Order, FCC 14-5. This is Stage 1 of the FCC's Phase II experiment proposals and Monarc anxiously awaits release of the Stage 2 formal proposal requirements.

Background

Monarc Technologies is owned by Arcadia Telephone Cooperative ("Arcadia"), an Independent Local Exchange Carrier which was founded in 1906 and serves the community of Arcadia, Iowa. Monarc and Arcadia have a proven success rate of deploying rural high-speed last mile broadband networks, voice service, and numerous other communications services. Monarc was established in 2009 deploying high quality voice and high-speed broadband services as a rural competitive local exchange carrier ("CLEC") in the town of Denison, IA. Monarc is not a recipient of Universal Service Funding; however, Arcadia is a current recipient and therefore Monarc's organization has extensive experience with the requirements of filing required reports and maintaining support.

Proposed Service Area

Monarc's proposed service area is a rural area located in western Iowa. The proposed service area covers the following census tract numbers which are located in Crawford county Iowa: 19047070100, 19047070200, 19047070300, and 19047070500. Completion of the proposed project would represent an edge out from our current operations. Based on the Federal Communication Commissions ("FCC") Public Notice, DA 14-154, report dated February 5, 2014 for price cap areas, the proposed project is estimated to provide broadband access to a total of 808 eligible high cost locations once completed, with 284 locations considered as extremely eligible high cost locations.

Monarc is unable to determine the total number of Community Anchor Institutions ("CAIs") located within the proposed project since the eligible unserved high cost census blocks within the four selected census tracts have yet to be identified, however Monarc currently services many CAIs within its current exchange area and, if funded, could offer scalable high-speed broadband to CAIs located within the proposed service area.

Broadband Technology

The proposed area is adjacent to Monarc's current service area and the existing network can be added on to provide service to the proposed area. The proposed target area is sparsely populated, diminishing economies of scale for any broadband access technology, wired or wireless, therefore Monarc anticipates utilizing a combination of 3.650 GHz and Fiber to the Premises (FTTP) for the proposed project area in order to build a high-speed broadband network. A portion of the last mile broadband technology will be fixed, Point-To-MultiPoint (PMP) Broadband Wireless Access (BWA), utilizing lightly licensed WiMAX technology on 3.65 GHz. The remaining portion of the last mile broadband technology will be FTTP.

Once the final rules and unserved census blocks within the proposed census tracts for the Rural CAF Experiment are released by the FCC, Monarc will better define the broadband technology placement within the proposed service area. However, for the modest service levels contemplated by CAF Phase II, BWA provides an initial means to deliver this modest service quickly to sparse locations. For the longer term though, wireless capacity upgrade costs will rise much more steeply than that of fiber optic. Where there is any population density at all, only fiber optic will support the continually steeply increasing broadband demand for the long term without prohibitive upgrade costs. Except for the most isolated locations, a cross-over point inevitably will be reached where fiber-optic becomes the prudent long-term solution. BWA will be deployed either as the modest and only solution indefinitely for those most isolated locations, or, until it can be supplanted by fiber-optic technology upon approaching the cross-over point. FTTP will be utilized for the remaining locations where there is sufficient population density and thus economies of scale to indicate the use of this truly only long-term solution from the outset, eliminating the need for an interim BWA solution.

This architecture would provide a robust, broadband networking solution that offers the flexibility to meet the customer demand. The deployed technology will enable Monarc to offer a variety of communications and entertainment services, including high-speed Internet access, carrier-class telephony, Voice over Internet Protocol (VoIP), and interactive, two-way broadband services.

Service Offerings

The service offerings anticipated by Monarc are voice service and high-speed broadband service. The following speed tiers are expected to be available to all homes and businesses passed and can be increased over time as demand changes, including CAIs within the proposed project area: 5 MB, 10 MB, 15 MB, 20 MB, and 30 MB. Higher Broadband Speeds may be made available to CAIs that require higher bandwidth in the FTTP network area.

The pricing has not yet been determined by Monarc, but is expected to be similarly priced with services offered currently in the surrounding area. Monarc estimates the project to be completed within 18 to 24 months of project award.

Funding

Monarc is unable to determine the total cost of the proposed project since the eligible unserved high cost census blocks within the four selected census tracts have yet to be identified, however based on the preliminary list of eligible unserved census blocks as well as Monarc's experience with building broadband networks, Monarc expects to complete the project within the funding constraints proposed for CAF Phase II. Monarc expects to request a portion of the funding up front and the remainder over a period of five years. The funding request is due to the high cost of building a robust, scalable, high-speed broadband and voice network in rural Iowa. Once the final rules and budget for the Rural CAF Experiment are released by the FCC, Monarc will better define the project and applicable costs should a formal proposal be submitted.

Conclusion

Monarc appreciates the opportunity that the FCC is providing by allowing rural competitive local exchange carriers to submit an Expression of Interest for the Rural CAF Experiment. As stated above, Monarc is considering a FTTP/3.650 GHz network build within four census tracts that are located within one county in Iowa. By funding the proposed project, Monarc can reach out to neighboring areas that lack access to high-speed broadband capabilities in rural Iowa. The Monarc proposed network would provide the residents, businesses, and CAI's in the FTTP portion of the network with a high-speed, robust, scalable broadband networking solution that offers virtually unlimited bandwidth to areas that has been lacking service. The 3.650 GHz network portion will provide a broadband networking solution to those that have been lacking in a quick turnaround time.

Monarc is committed to providing a solution to the challenges the residents and businesses have with the current lack of high quality and dependable high speed broadband. Monarc is an experienced, dedicated, and committed telecommunications provider. The experienced staff is extremely knowledgeable and holds the resources to complete the proposed overbuild and deliver advanced services to each person who lives and works within the proposed service area. The proposed project cannot be completed without FCC funding. Thank you for taking this proposed project into consideration as the final rules and budget are set for the available experiments.