

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

In the Matter of)
)
Modernizing the E-rate) WC Docket No. 13-184
Program for Schools and Libraries)
)

**COMMENTS OF
INTEGRATED LOGIC, LLC**

Integrated Logic, LLC, (“Integrated Logic”) submits these comments in response to the March 6, 2014, Public Notice issued by the Wireline Competition Bureau (“Bureau”) in the E-rate Modernization proceeding seeking focused comment on issues related to funding for “internal connections.”¹ Integrated Logic’s clientele includes many remote school districts in Alaska and our comments are based on years of experience helping them overcome extreme physical and technical obstacles. These obstacles – principally extreme weather conditions and geographic remoteness – are unique to Alaska and must be taken into consideration as the Commission determines how best to meet its obligations to enhance the availability of high capacity broadband to the nation’s elementary and secondary school *classrooms*.²

¹ *Wireline Competition Bureau Seeks Focused Comment on E-Rate Modernization*, Public Notice, WC Docket No. 13-184, DA 14-308, ¶¶ 8-23 (Mar. 6, 2014) (*Public Notice*); *In the Matter of Modernizing the E-rate Program for Schools and Libraries*, WC Docket 13-184, Notice of Proposed Rulemaking, FCC 13-100 (rel. July 19, 2013).

² See 47 U.S.C. § 254(h)(2)(A) (directing FCC to establish competitively neutral rules to enhance “access to advanced telecommunications and information services for all public and non-profit elementary and secondary school classrooms”).

I. BACKGROUND

Founded in 2008, Integrated Logic is a networking solutions company serving education, healthcare and medium enterprise organizations in rural Alaska. Integrated Logic is managed by its founders CEO Chris Johnson and COO Allen Chadwick. The partnership was formed while the two completed an IT infrastructure project in the village of Akiachiak, just up the Kuskokwim River from the hub town of Bethel in western Alaska. Together this management duo now leads a group of approximately 30 full time employees. Integrated Logic's main office is in Palmer, Alaska with an account team in Anchorage and a field office in Bethel.

II. E-RATE FUNDING FOR INTERNAL CONNECTIONS IS IMPORTANT FOR ALASKA SCHOOLS WHERE INSTALLING AND MAINTAINING SUCH NETWORKS IS UNIQUELY DIFFICULT

Integrated Logic confines these comments to addressing whether LAN deployments vary significantly in cost between non-rural and rural or remote environments.³ In Integrated Logic's experience, every aspect of providing high capacity broadband to the classroom is much more costly in Alaska. Just getting to these locations is a huge challenge as many lack any type of road access. This means equipment and personnel must be airlifted in, or brought in via hovercraft, boat, snowmobile, or all-terrain vehicle. Even through unconventional travel methods, weather conditions limit the times of the year when network installations can occur.

Power is often not as reliable in remote Alaskan communities, so something as basic to a network installation as an uninterrupted power supply ("UPS") is even more critical, and represents a greater installation challenge and cost. For example, UPS sizes must be bigger, of

³ See *Public Notice*, at ¶ 20 ("unlike the costs of broadband connectivity to schools, we expect that the prices of many parts of LAN and Wi-Fi deployments (e.g., switches, routers, and wireless access points) should vary little based on the geographic location of schools and should generally scale proportionally with the size of the student body. We seek comment on these expectations.")

higher quality, and need replacement more often (sometimes every year). In addition, expensive outdoor-rated wireless equipment for bridging between buildings is often needed because typical network gear isn't rated for exposure to external temperatures below -20F – and many of these communities are colder than that for months of the year. Cooling and heating vital network components is more important, more difficult, and more costly. For example, extreme weather conditions along with marine environments that bring corrosion caused by salty air, make effective climate control for network equipment rooms critical and also more of a challenge. The bottom line is networks and network equipment are more expensive to install, repair, and maintain, and wear out much faster in remote Alaskan communities.

III. CONCLUSION

For the reasons discussed herein, we urge the Commission to reject any internal connections funding allocation methods that would create a funding formula – such as per student or per building – that fails to adequately recognize the unique conditions and higher costs faced by schools in remote Alaska.

Respectfully submitted,

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