NH SAU104, Rollinsford School District

Request for Proposals (RFP): Category Two Network Infrastructure

E-Rate Funding Year 2027

New Hampshire SAU104, Rollinsford School District, is seeking competitive, E-rate eligible proposals for the acquisition of layer-2/layer-3 access switching hardware, physical distribution components, power protection, and multi-year comprehensive technical support options. All equipment and services specified within this document must be fully compliant with the Universal Service Administrative Company (USAC) Schools and Libraries program guidelines.

Technical Specifications: Multi-Gigabit Power over Ethernet (PoE) Access Switches

The district requires three high-performance 24-port access switches to support newly deployed Wi-Fi 7 wireless access points and high-power PoE endpoints.

Functional Requirements

- **Port Density:** Minimum 24 Multi-Gigabit (100M/1G/2.5GE) RJ45 access ports to maximize Wi-Fi 7 backhaul performance.
- **Uplink Connectivity:** Minimum 4 dedicated 10 Gigabit SFP+ ports for upstream links. The architecture must support media-agnostic flexibility for future optical transceiver integration or alternative interconnect media.
- **Power over Ethernet:** Minimum 410W total PoE/PoE+ power budget, supporting high-power IEEE 802.3bt (Type 3/Type 4) devices on designated ports.
- **Security & Link Features:** Hardware support for MACsec link-layer encryption, VLAN segmentation, IEEE 802.1Q tagging, Link Aggregation (LACP), and Spanning Tree Protocol (STP/RSTP/MSTP).
- **Management & Security Fabric Integration:** Must support native, seamless configuration and management integration with the district's existing Fortinet FortiGate firewall infrastructure. Proposed hardware must allow centralized orchestration and policy enforcement directly through this existing firewall interface (via FortiLink or an equivalent proprietary/open control protocol) without requiring separate management software or overlay controllers.
- **Command Line & Backup Management:** To ensure operational continuity if the primary management interface or central controller becomes unavailable, hardware must explicitly support direct, localized terminal control. This includes a secure

Command Line Interface (CLI) accessible via SSH or a physical serial console port, alongside standard SNMP v2c/v3 and a localized HTTPS web GUI.

- **Reference Model:** Fortinet FortiSwitch-324G-FPOE (SKU: FS-324G-FPOE) or functional equivalent meeting all native firewall-integration and CLI terminal criteria.

Required Multi-Year Technical Support & Maintenance

Vendors must submit separate, distinct line-item pricing for two operational support options. Support contracts must provide 24x7 technical assistance center (TAC) access, immediate firmware/OS updates, and Next Business Day (NBD) advanced hardware replacement. The district intends to fund the selected support contract upfront in full during the initial purchasing cycle; therefore, all support options must be structured for upfront payment as an Internal Connections component.

Option A: 3-Year Operational Support Lifecycle

- Ref: Fortinet FortiCare Premium 3-Year Contract (SKU: FC-10-324GF-247-02-36) or functional equivalent.
- 36 consecutive months of coverage from the deployment date.

Option B: 5-Year Operational Support Lifecycle

- Ref: Fortinet FortiCare Premium 5-Year Contract (SKU: FC-10-324GF-247-02-60) or functional equivalent.
- 60 consecutive months of coverage from the date of deployment.

Physical Layer Infrastructure & Power Protection Requirements

To accommodate switch termination, patch distribution, structural battery runtime protection, and hardware containment, the following infrastructure materials must be supplied:

- **Termination Panels:** High-density, 48-port Category 6/6A RJ45 patch panels designed for standard 19-inch equipment racks. Panels must feature rear cable management bars for strain relief and robust punchdown termination blocks.
- **Environmental Security Cabinet:** A rugged, wall-mountable, fully enclosed network rack to protect sensitive equipment. The enclosure must feature a locking front door (with plexiglass), filtered passive air intakes, and protected cable entry to protect from cable damage.

- **Uninterruptible Power Supplies (UPS):** Line-interactive rack-mount network battery backup systems configured to deliver simulated or pure sine wave operational power, automatic voltage regulation (AVR), and safe remote power monitoring integration capabilities.
- **Copper Patch Cords:** Factory-terminated, verified Category 6/6A snagless component patch cables. All cords must be quoted as materials only (color to be determined at procurement selection).

Equipment & Component Inventory

Quantity	Component Type	Detailed Material & Specification Description
3	Active Hardware	**24-Port 2.5GE Multi-Gigabit PoE+ Access Switch** *Reference Model: Fortinet FS-324G-FPOE or functional equivalent*
3	Operational Support	**Multi-Year Support Contract Bundle (Upfront Payment)** *Provide standalone line items for both 3-Year and 5-Year terms*
3	Power Protection	**1U Rack-Mount Uninterruptible Power Supply (UPS)** *Minimum 500VA / 300W Line-Interactive backup, 1U low-profile form factor. Reference Model: Tripp Lite SMART500RT1U or functional equivalent.*
3	Patch Infrastructure	**48-Port Category 6/6A RJ45 Punchdown Patch Panels** *19" rack-mountable with rear cable management bars or equivalent*
1	Equipment Protection	**Wall-Mount Enclosed Locking Server/Network Cabinet** *Locking plexiglass door, passive filtered intake design or equivalent*
25	Interconnect Media	**1-Foot Category 6/6A RJ45 Snagless Patch Cords** (*Color TBD*)
25	Interconnect Media	**3-Foot Category 6/6A RJ45 Snagless Patch Cords** (*Color TBD*)

Proposal Submission Guidelines & Vendor Instructions

- **Required Email Subject Line:** All questions, inquiries, and final proposal submissions must include the exact phrase **"SAU104 FY2027 C2 SWITCH BID"** in the email subject line to guarantee review and prevent filtering issues.
- **Equivalent Architecture:** Manufacturer brands, models, or part numbers establish required performance criteria. Functional equivalents from alternative manufacturers will be fully evaluated.
- **Cost Allocation & Separation:** Proposals must distinctly segregate individual hardware appliances, physical rack accessories, power protection units, distribution patch cords, and ongoing technical support options into independent line-item pricing elements.
- **Labor Exclusions:** This solicitation is for the procurement of physical materials and technical support options only. No physical on-site installation, structured field termination labor, or system configuration services are requested.
- **E-Rate Compliance:** Bidding vendors must possess a valid Service Provider Identification Number (SPIN) and maintain a status of good standing with USAC.

Contact Information & Deadline

Technical inquiries and formal quote submissions should be directed via email to the following representatives. Proposals must be received electronically no later than **3:00 PM EST on the 29th day following the public certification date of the corresponding FCC Form 470**.

Technical Point of Contact:
Tom Lebel
Director of Information Technology
tlebel@sau104.org

Administrative Point of Contact & Carbon Copy (CC):
Alyson Rachkoskie
Admin Assistant
Secretary@sau104.org
