

Outsourcing Tower Maintenance

How Vertix Consulting Helped a Top U.S. Tower
Company Achieve its Outsourcing Goals



THE CHALLENGE

A major U.S. tower company was facing the realities of significant growth that doubled the number of its lit cell towers to more than 17,000. The legacy perspective was that tower climbing for lighting support was a “core differentiator” in the marketplace. However, without significant scaling, the Tower Technician support staff charged with lighting repair and maintenance was unable to meet demand growth, and the company was forced to increasingly rely on third parties to supplement the embedded staff.

Further, a disparate approach to lighting repair and maintenance lacked the consistent scale, quality, and enabling technology required for long-term success. The company assumed a significant amount of liability in self-performing lighting support, and the entire operation, which also included outfitting, training, and fleet maintenance, was becoming costlier than had been anticipated.

A national strategy was sought to create consistent standards and processes for lighting repair and maintenance, vendor pricing, and enhanced enabling technology that would result in an improved operating model, all while achieving at least a cost-neutral business case.



THE SOLUTION

Vertex was engaged to assess the U.S. tower company's current environment, redesign processes, identify third parties that might be leveraged as part of a national lighting strategy, develop a Request for Proposal (RFP), manage vendor selection, lead contract negotiations, and coordinate transition activities.

A Core Team consisting of client Regional Directors, Territory Supervisors, and Technical Services was assembled in support of the initiative. This team was well versed in the existing end-to-end lighting support processes, third party vendor landscape, and had first-hand knowledge of tower climbing. Additional subject matter experts from Operations, Human Resources / Recruiting, Sourcing, Supply Chain, Legal, Accounting, and FP&A were leveraged throughout the project on an as needed basis.

Current state analysis identified all lit towers which were generating tens of thousands of alarms annually. Approximately 75% of alarms requiring manual intervention were resolved

internally and the rest utilized third party vendors. The existing operating model was inconsistently executed, had no national pricing strategy, and often resulted in unnecessary, multiple internal truck rolls per tower before Notices to Airmen (NOTAMs) were closed per FAA requirements.

Vertex identified multiple opportunities for process standardization and efficiencies. A new approach and streamlined processes were designed to address alarm triage, technology and tools, reductions in truck rolls, and the refinement of a national lighting strategy, which retained alarm monitoring and triage while outsourcing tower climbing and lighting repairs.

THE RESULTS

Vertex used the results of the current state assessment and future state design to craft an RFP that contained all lighting support requirements, performance standards (service levels) with associated performance credits for failure to achieve, and addendums



to existing Master Contracting Agreements. The RFP was distributed to multiple lighting vendors and the evaluation process resulted in contracts being awarded to vendors on a regional basis (with a backup vendor active in each region).

Vertex's support included:

- Working with the Core Team to perform current state analysis and process mapping, identify process improvement opportunities, capture process volumes, and design new lighting processes
- Developing the RFP, creating service level requirements, evaluating and ranking vendor proposals, negotiating pricing, creating a vendor evaluation model, and making final vendor selections
- Handling all interactions between the client and the prospective suppliers
- Developing a business case model and working with FP&A to achieve alignment on business case assumptions and financial allocations
- Participating in design workshops with Operations to define lighting process workflow and reporting requirements
- Working with Legal to create a contract addendum applicable to the scope of work contained in the RFP
- Working with Supply Chain to ensure compliance with internal company sourcing standards
- Working with Strategic Sourcing and the client's third party logistics vendor to refine lighting parts replenishment processes
- Working with Accounting to design coded invoicing requirements to replace purchase orders for repair and maintenance work



- Working with HR to create an employment commitment that required vendors to offer positions to all displaced company employees, protecting salary and benefits, and guaranteeing employment for at least twelve months
- Collaborating with HR to create a new Lighting Project Manager (LPM) position and define job requirements
- Developing a communications strategy, with HR, to address employee transition
- Working with vendors and HR to ensure that vendor offers to displaced employees were compliant with contractual requirements
- Working with Training and the Core Team to identify future state training needs, develop training content, and deliver combined internal and vendor training

- Working with the Core Team to manage the transition of all lighting support activities to vendors

THE RESULT

Through effective management of the process design, vendor selection, and transition processes, our team implemented new lighting processes and transitioned all lighting support to third party vendors so all objectives would be met. While the lighting program objective sought a cost-neutral solution, Vertex negotiated services and pricing agreements that resulted in \$4M of savings from both run rate and total cost of ownership perspectives over the 5-year term of the agreements:

- Elimination of all Tower Technician positions and the creation of LPM positions for a net headcount reduction of 78%
- Moved to a 100% outsourced model for lighting support that eliminated the liability incurred



from tower climbs associated with operating an internal lighting repair and maintenance program

- Significant reduction in the number of multiple truck rolls per NOTAM that were prevalent and expensive in the current state. The new model eliminates multiple truck rolls except under specific, pre-defined conditions
- Reduction in cycle time for NOTAM resolution from a 30-day internal target to 20 days
- Definition of new lighting support processes that feature LPMs performing initial alarm triage, assigning Repair and Maintenance work orders for NOTAMs to contracted vendors, evaluating the need for lighting upgrades vs. repairs, vendor management, vendor parts replenishment approvals, and invoice reconciliation
- Implementation of enhanced technology support for end-to-

end process workflow that is used by LPMs and vendors to manage lighting support activities and track vendor performance against contracted service levels

- Regional pricing model that includes fixed pricing for Repair and Maintenance, Beacon Extensions, Upgrades, and remobilization fees
- Simplification of the invoicing process by moving away from individual purchase orders for each lighting repair to coded invoices that capture all lighting repairs performed for an invoicing period
- Successful transition of all lighting support activities to contracted vendors within project timelines

The major U.S. tower company achieved all lighting program objectives, prepared its retained organization for ongoing vendor management responsibilities, deployed supporting systems and tools, and transitioned services over the course of 7 months.





About Vertex Consulting

We are a highly specialized consulting firm that provides pragmatic and actionable insights on the most critical issues faced by providers and consumers of telecom, media services, and technology.

At Vertex, we pursue our collective passion for helping carriers, OEMs, tower companies, MSOs, network services vendors, equipment suppliers, and telecom and technology consumers resolve their most complex strategy, sourcing, and deployment challenges. From helping a carrier deploy a 4G network to negotiating an IoT services contract for a client in the manufacturing sector, we cover the entire TMT value chain.

Our focus and simplified model enables us to deliver an alternative vision for our clients: producing client-centered solutions in a way that only experienced and proven professionals can.

For more information on Vertex and its services portfolio please visit www.vertexconsulting.com & follow us on twitter @vertexconsult.