



**Solution Brief:**  
**LightRiver Technologies**  
**flexOPS™ Solution**



## Executive Summary

In the dynamic telecommunications landscape, network reliability and efficiency are paramount for utilities, service providers, and data centers. LightRiver Technologies' flexOPS™ is a sustaining engineering solution designed to optimize and maintain high-capacity, resilient optical transport networks. By leveraging expert project engineering and advanced software tools, flexOPS ensures proactive risk identification, streamlined operations, and enhanced network performance, reducing downtime and operational costs while supporting mission-critical connectivity.

## Introduction

Telecom networks face increasing demands for bandwidth, reliability, and scalability, driven by 5G, AI, and cloud services. Downtime is not just inconvenient, it's costly, with losses averaging \$5,600 per minute for enterprises (Gartner). LightRiver's flexOPS addresses these challenges by providing tailored engineering support to maintain and optimize multi-vendor optical networks, ensuring seamless performance for utilities (e.g., smart grids), service providers (e.g., 5G backhaul), and data centers (e.g., hyperscale interconnects).

## The flexOPS™ Solution

flexOPS is a comprehensive sustaining engineering service that combines LightRiver's deep expertise in optical networking with software-driven optimization.

Key Components Include:

- **Proactive Risk Management:** flexOPS engineers use advanced analytics to identify potential network failures before they occur, leveraging tools like LightRiver's netFLEX® platform for real-time monitoring and diagnostics.
- **Multi-Vendor Expertise:** Supports diverse equipment from vendors like Nokia, Ciena, and Cisco, ensuring seamless integration and operation across legacy and next-gen systems.

- **Network Optimization:** Fine-tunes network performance for capacity, latency, and resiliency, critical for high-stakes applications like utility grid control or data center interconnects.
- **Lifecycle Support:** Provides ongoing maintenance, upgrades, and troubleshooting, reducing the need for dedicated in-house staff and lowering operational costs.

flexOPS integrates with LightRiver's broader portfolio, including Factory Built Networks® for rapid deployment and netFLEX® for automation, creating a holistic approach to network management.

## Benefits for Stakeholders

- **Utilities:** Ensures reliable communication for smart grids and renewable energy projects, minimizing outages that could disrupt power delivery.
- **Service Providers:** Enhances 5G and broadband performance, reducing churn by maintaining high uptime (e.g., 99.999% reliability) and enabling faster service rollouts.
- **Data Centers:** Optimizes high-bandwidth interconnects for AI and cloud workloads, cutting power consumption and latency.
- **Cost Efficiency:** Reduces OPEX by virtualizing engineering resources and preventing costly downtime, with potential savings of 20-30% on maintenance budgets.
- **Scalability:** Adapts to evolving network demands, supporting upgrades to 400G/800G systems without disruption.

## Case Study: Utility Network Optimization

A regional utility struggled with intermittent outages in its optical network, impacting smart grid operations. LightRiver deployed flexOPS to conduct a network audit, identifying weak points in legacy equipment. Using netFLEX analytics, flexOPS engineers implemented predictive maintenance and optimized routing, reducing downtime by 40% and saving \$500,000 annually in operational costs. The utility also gained scalability for future renewable energy integrations.

## Conclusion

LightRiver's flexOPS solution empowers telecom integrators and their clients to maintain robust, high-performance optical networks in a challenging economic and technical environment. By combining expert engineering with software-driven insights, flexOPS delivers reliability, cost savings, and scalability, making it an essential tool for utilities, service providers, and data centers. As tariffs and network demands evolve, flexOPS positions LightRiver as a trusted partner for future-ready connectivity.

***Discover how flexOPS™ can transform your network operations.***

Visit [www.lightriver.com](http://www.lightriver.com) to schedule a demo or contact LightRiver Technologies at [lrtsales@lightriver.com](mailto:lrtsales@lightriver.com) for a consultation to assess your infrastructure and unlock the full potential of your optical transport network.

### About LightRiver

*LightRiver is the premier network productivity solutions provider focused on enabling client success in the dynamic world of connectivity. Backed by our industry award-winning Factory Built Networks®, netFLEX® automation, Prism Orchestration, nIO (inventory optimization) and flexOPS™ sustaining engineering solutions, we consult, commission, automate, and optimize multi-vendor, software-controlled and open DWDM, MPLS, IPoDWDM and Carrier Ethernet networks for those that need the highest capacity, reliability, resiliency, and manageability that technology can deliver.*

*LightRiver is a portfolio company of Grain Management, LLC, a leading global investment firm focused on the telecommunications sector. LightRiver's team of experts deliver real value, with 99999's quality and unparalleled customer care in packet optical networking, by accelerating client growth and profitability.*