

CASE STUDY | ENERGY &amp; UTILITIES

# Eliminating Costly Downtime for a Remote Solar Farm

Engineered identity that survives path changes.  
No more 24-hour ISO shutdowns.

Solar Farm Telemetry

SCADA Connectivity

ISO Compliance

**~\$1M**

SAVED PER OUTAGE AVOIDED

**<2 sec**

PATH RECOVERY TIME

**Zero**

24-HOUR SHUTDOWNS

ENERGY &amp; GRID OPERATIONS

## The Challenge

Brief outages triggering \$1M shutdowns.

A remote desert solar farm was losing ~\$1M in revenue every time a brief Starlink outage triggered an automatic 24-hour shutdown from the Independent System Operator. Backup LTE was in place, but each failover broke the VPN to the ISO because the public IP changed.

The resulting 5–7 minute reconnect blew past the ISO's 1-minute rule. Multiple vendors and large consultancies had worked the problem for nearly a year without resolution.

Revenue-Impacting Outages

Broken VPN Identity

ISO Compliance Outages



# The Solution

Persistent identity across every path.

Contrivian identified the true root cause: not failover speed, but identity loss during the path change. We deployed a dual-tunnel Contrivian Lighthouse™ architecture — one over Starlink, one over LTE — both terminating at a nearby data center behind a fixed public IP.

The ISO's VPN now sees a single persistent identity regardless of which underlying path carries the traffic. Contrivian NorthStar™ provides continuous telemetry and lifecycle oversight.



- Telemetry-Driven
- Sub-Second Recovery
- Fixed Public IP
- Dual-Tunnel Lighthouse

Solution Stack

contrivian lighthouse™
contrivian northstar™
STARLINK
MULTI-CARRIER LTE
DATA-CENTER TRANSPORT

UPTIME

## The Outcome

Shutdowns eliminated, revenue protected.

The architecture delivered immediate results that a year of vendor work could not:

- > 24-hour automatic shutdowns eliminated — approximately \$1M in losses avoided per event.
- > Path transitions complete in as little as 1.5 seconds; detection set at 15 seconds.
- > VPN session to the ISO remains unbroken through brief Starlink interruptions.
- > Blueprint now under evaluation by the ISO for broader fleet adoption.

- Revenue Protected
- Fleet-Ready
- Seamless Network
- ISO Compliant



INTELLIGENCE · EXPERIENCE · ACCOUNTABILITY · TRUST

**Intelligence is not faster failover.**  
**It is engineering the disruption out entirely.**