Power Outage Analysis Report

Executive Summary

Metric	Value
Total Reports Analyzed	2
Real Outages Confirmed	1
False Positives Identified	1
Accuracy Rate	50.0%
Report Generated	2025-06-22 16:08:55

Detailed Analysis

Classification Performance

- **Count**: 1
- **Average Confidence**: 0.80
- **Total Customers Affected**: 150
- **Average Customers per Outage**: 150 (if applicable)

- **Count**: 1
- **Average Confidence**: 0.80
- **Total Falsely Reported Customers**: 45
- **Average Customers per False Report**: 45 (if applicable)

Dataset Information

Dataset information not available.

Geographic Analysis

• **Total Mapped Locations**: 2
• **Real Outages**: 1 (marked in red)
• **False Positives**: 1 (marked in blue)
• **Map Center**: 40.7309, -73.9870

• **Latitude Range**: 40.7128 to 40.7489 (spread: 0.0361°)
• **Longitude Range**: -74.0060 to -73.9680 (spread: 0.0380°)

• **Real Outages Cluster Center**: 40.7128, -74.0060
• **False Positives Cluster Center**: 40.7489, -73.9680
• **Cluster Separation**: Approximately 0.0524° geographic distance

• ■ **Red Markers**: Confirmed real outages
• ■ **Blue Markers**: Identified false positives

Detailed Analysis

• **Real outages with >80% confidence**: 0
• **False positives with >80% confidence**: 0

• **Performance Needs Improvement**: Consider reviewing classification criteria and weather thresholds.
• Continue monitoring weather patterns for outage correlation
• Review sensor calibration for areas with high false positive rates
• Implement additional validation for reports during mild weather conditions
• Consider geographic clustering patterns for predictive maintenance

• Classification based on historical weather data correlation
• Confidence scores reflect model certainty in classification decisions
• Geographic analysis helps identify regional patterns and equipment issues

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This report was generated by the LLM-Powered Outage Analysis Agent

Real Outages - Detailed List

Location	Date/Time	Customers	Confidence
40.7128, -74.006	N/A	150	0.80

False Positives - Detailed List

Location	Date/Time	Customers	Confidence
40.7489, -73.968	N/A	45	0.80