



Case Study – Lightning versus Wear & Tear HVAC System Failure Claim

Challenge: The Insured reported lightning damage to their residential 2.5-ton split HVAC system (both the outdoor heat pump condenser and indoor air-handling unit) had occurred during a storm, although the exact date of the event could not be provided outside of a five day window. A power outage to the residence also reportedly occurred during the same timeframe and was blamed by the Insured on a tree branch hitting a power line in the neighborhood. The Insured, based on estimates from service provider, submitted a claim for two different brands of replacement HVAC systems at either \$5,950.43 or \$5,589.43. However; was the damage due to lightning, electrical utility power surge, or the age of the system? Could repair versus replacement be more cost-effective, and was the low bid quote an appropriate claim cost?

Solution: We were assigned by the insurance carrier to conduct a desk review, remote damage assessment, causation investigation, and Like Kind and Quality (“LKQ”) analysis of the proposed charges in order to provide a Replacement Cost Value (“RCV”) recommendation for the claim. Telephone interviews of the Insured and the service provider were conducted, details on the damaged system components were obtained, and LKQ costing (wholesale and retail) of the proposed and the actual LKQ equipment direct replacement components were procured from an independent HVAC system distributor. Weather and news media databases were evaluated for the date of loss indicating that significant wind (to 46 mph on one date) and thunderstorms (3.0” of rain on a separate date) occurred in the area on three of the five potential dates of loss but did not result in reported power outages. A lightning strike analysis was conducted on the possible three dates of loss, with the determination that strikes did not occur within five miles of the Insured property. The local electrical utility was contacted and confirmed that the Insured reported a power outage but that no electrical transmission disturbances occurred in the area during the potential period of loss and no tree branches were found to have affected power lines in the area. The reported power outage at the residence was traced to a blown fuse for the HVAC system which did not affect the remainder of the property.

Findings & Value: With the finding of the cause of loss being neither a lightning event nor a power surge, we thoroughly examined the specifications of the original HVAC system. The serial number of the unit revealed that the system was over 17 years-old. Our remote damage assessment revealed that the compressor had shorted to ground (causing the blown fuse), with additional component thermal and electrical damages that were classic indications of an overheated and seized compressor. This failure mechanism is a common end-of-life causation due to system wear & tear. This finding, with justification, was reported to Insurer along with our LKQ costing analysis for the replacement of the system, which was \$780.81 lower than the proposed amount. The claim was denied as an uncovered loss.