# IAEI UL Question Corner

# **2011** UL White Book Now Available



When is the 2011 UL White Book available, and what is new for 2011?

The 2011 UL White Book started distribution April 1, 2011. The UL White Book is considered by many as "Part 2 of the *Code*."

That is because without the White Book, it is difficult to determine compliance with the National Electrical Code (NEC). New to the 2011 White Book is the Index of Product Categories Correlated to the 2011 NEC, just pick your 2011 NEC section and find the applicable Listed product category Guide Information to comply with the Code section. In addition to the 2011 Index, there is also the Index of Product Categories Correlated to the 2008 NEC. Also new to the White Book is the Lightning Protection Application Guide, which is one of nine electrical marking and application guides in Appendix A of the White Book. In 2010, UL added the Alternative Energy Equipment and Systems Application Guide, which includes important application information on photovoltaic (PV) systems, wind turbines, generators, fuel cells, etc. So pick up a 2011 UL White Book or White Book CD at your local IAEI chapter meeting or at the annual IAEI Section Meetings this fall. You can also access a PDF version of the White Book online at www.ul.com/whitebook.



#### Has UL investigated the effects of sprayon foam insulation on Type NM cable jackets or individual conductor insulation?



UL has not specifically investigated the effects of spray-on foam building insulation on the jacket or insulation materials of NM

cable. UL Lists NM cable under the product category Nonmetallic Sheathed Cable (PWVX), located on page 293 in the 2011 UL White Book and online at www. ul.com/database and enter PWVX at the category code 4

## WHITE BOOK 2011

### Guide Information for Electrical Equipment

UL Product Categories correlated to the 2008 & 2011 National Electrical Code® (NEC®)

Content in effect as of January 24, 2011

search field. Type NM cable is evaluated for compliance with the *Standard for Safety for Nonmetallic-Sheathed Cable* ANSI/UL 719 for installation in accordance with Article 334 in the *NEC*. UL 719 does not address testing Type NM cable for spray foam building insulation compatibility.

UL is not aware of evidence that would suggest chemical corrosion. Once cured, these spray-on foam materials are inert solids and are not expected to effect the PVC insulation or jacket. While the curing process varies with the type of spray-on foam, the curing process usually begins immediately after application, with the foam being fully cured in 1 to 12 hours. Since the majority of these products do not contain volatile organic compounds (VOCs) or formaldehyde, these foams, in the non-cured state, are currently considered compatible with the cable insulation and jacket.

There have been noted cases of conductor insulation/ jacket damage in installations where spray-on foam was applied in direct contact with insulated cables. It is possible that the damage noted is from incorrect application of the spray-on foam insulation, applying more spray-on foam in a single pass than recommended. Not following the manufacturer's recommendations by applying the spray-on insulation in too thick of a layer could result in higher curing temperatures that may damage building materials, including electrical cables. Damage that is a result of thermal heating due to the curing process is consistent with the type of damage reported.