3-2013

Critical Need for Improved Construction Standards for Disaster Resilient Homes

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The University of New Orleans

Friday, March 22, 2013

Workshop Session 5

Time of Session: 1:30-3:00 PM

Session Title: University Education & Outreach—Building Resilient Communities

A. Critical Need for Improved Construction Standards for Disaster Resilient Homes

   Speaker: **Vijaya (VJ) Gopu**, The University of New Orleans

B. A Resilience Success Story: How Significant Losses were avoided during Hurricane Isaac

   Speaker: **John E. Bourdeau**, FEMA

Room: 250

Head Count: 12

Note Taker: Carrie Beth Lasley

VJ Gopu

Katrina

- Katrina damage was extensive, but winds in NOLA ere not high.
- Greatest depth of flooding occurred where there were not gates keeping water from entering the city in canals.
- Post-storm assessment indicated damage was worst where building codes were not followed. Why?
    - Lack of builder knowledge about load path or wind resistance
    - Lack of design codes
    - Lax enforcement

Types of design failure

- Improper/Inadequate sheathing attachments
- Inadequate anchorage of roof to wall or wall to foundation; failure to include hurricane straps or clips
- Inadequate nailing
- Inadequate wind resistance in roofing material
- Improper anchorage of gable-end walls
- Absence of impact-resistant glazing or impact-resistant covering of glazing
- Inadequate ties to veneer or unreinforced block walls

Status of Codes

- Pre-K
    - LA: Large cities adopted codes, but enforcement was lax
    - MS: Weak codes in coastal areas, last to adopt IBC
    - AL: IBC on state structures and public areas only, no residential. Attempts to adopt codes failed.
- Post-K
    - LA: 1 impacted parishes adopt IBC immediately; state in 2007
    - MS: Adopted IBC only in 5 coastal Parishes, with grandfathering
    - AL: No state code