

## Minutes of WHIP IAB Meeting

March 21 -22, 2019

Held at Texas Tech University, Lubbock, TX

### March 21

The meeting started at 8 am on March 21<sup>st</sup> with welcome by Joseph Heppert, Vice-President for Research, David Snow, Senior Managing Director of Research commercialization, and John Schroeder, Senior Director of the National Wind Institute, Texas Tech University.

Antitrust preamble and Non-disclosure agreement were read by Center Director Kishor Mehta. It is suggested that all IAB meetings start with reading of these two documents; NDA will be signed by non-IAB members in future meetings.

The agenda of the meeting is in the attachment to these minutes.

8:30: Andre Marshall, Program Director for NSF gave an overview of the NSF I/UCRC Center Program concepts and operation.

9:00: Self introduction of members, faculty and attendees; Participant list is attached.

9:20: Center theme, organization, and operation of WHIP Center were discussed by Kishor Mehta.

10:00 Coffee and networking break.

10:30: Daan Liang, Site Director for Texas Tech and Ioannis Zisis, Site Director for Florida International University gave an overview of the facilities available for research at respective sites.

11:00: Kishor Mehta explained project selection process for use by IAB.

11:15: Denis Gray, NSF Assessment Coordinator explained use of Level of Interest and Feedback Evaluation (LIFE) process to be used by IAB members

11:30 to 3:30 (with break for lunch) Presentation of research proposals by investigators; list of the proposals is in the attachment.

4:00 IAB organization meeting. Peter Dailey from RMS volunteered to be Chair of IAB and Kevin McGrath from GAF will be Chair-elect. The length of the terms will be decided during approval of Bylaws. The proceedings of the day, project selection process and management and mentoring of the projects were discussed by IAB members with input from NSF Director and Assessment Coordinator. The PIs of the projects were instructed to respond to questions raised by IAB members in the LIFE forms. The meeting was adjourned for the day at 5 pm.

6:00 to 8:30 Informal reception and dinner; courtesy of VPR office of Texas Tech

### March 22

The meeting reconvened at 8:00 am; open discussion on questions on LIFE Feedback by the group.

8:30 Executive session of IAB for portfolio evaluation, selection of projects and recommendations of budgets for each project. Project selection and budget recommendations by IAB are as follows:

- Proposals WHIP2019\_07 & 08 Wind-driven rain effects on building facades should be combined, PIs: Elawady, Lee, Zisis, and Chowdhury with budget of \$ 110,000 for year 1(a new scope of work to be developed)
- Proposal WHIP2019\_03 Prediction of wind and surge damage to buildings by hurricane, PI: Smith budgeted at \$ 100,000 for year 1
- Proposal WHIP2019\_01 Estimating surface wind conditions in landfalling hurricanes from dual-Doppler wind fields, PI: Schroeder budgeted at \$ 45,000 for year 1
- Proposal WHIP2019\_06 Investigation of wind performance of roofing elements using full-scale experimentation, PI: Chowdhury budgeted at \$ 70,000 for year 1
- Proposal WHIP2019\_11 Estimation of interior damage due to wind-driven rain ingress in to mid/high rise buildings, PI: Pinelli budgeted at \$ 50,000 for year 1
- Proposal WHIP2019\_09 Global compilation of best building practices in residential construction for withstanding wind hazards, PIs: Papadopoulos and Zisis budgeted at \$ 24,000 for year 1

The total funding for research for year 1 is \$ 399,000.

10:30 Open discussion by IAB members on the proceedings of the meeting and comments on the research proposals presented:

- Proposal 01 on hurricane wind field: Eric Haefli raised a question about producing wind speed map at 10m?
- Proposal 02 on tornado fragility curves: Kevin McGrath; how will this reduce damage?
- Proposal 03 on wind and surge damage: Brian Zachry noted that ten items given in the proposal needs careful consideration of duration and budget.
- Proposal 04 on computational fluid dynamics: Chris Melhauser indicated that the development can be very useful if it can be validated.
- Proposal 05 on economics of damage: no comment
- Proposal 06 on experiments on roofing: Kevin McGrath raised questions on how will this be different than what has been done? What type of roofing will be considered? Will wind driven rain be part of the work?
- Proposals 07 & 08 on wind driven rain: Will this be continuation of Florida grant program project? What type of windows and doors will be tested? Is it possible to estimate damage by the penetration of rain?
- Proposal 09 on global building practices: Peter Dailey commented that this would be a good project with expanded scope and if it can include variation in building practices.
- Proposal 10 on climate change: Chris Melhauser commented that the scope is too large for a two year project.
- Proposal 11 on interior damage by wind: Karthik Ramanathan asked if the results of projects 07 & 08 be used to validate numerical/computational algorithm.
- Proposal 12 on insurance protection gap: Karthik Ramanathan commented that the scope is too broad.

PIs are requested to make changes/correction to recommended proposals as suggested by IAB in next couple of weeks. There will be a conference call when the changes could be discussed. Next IAB meeting will be in Fall at FIU. The meeting adjourned at 11:30 and several IAB members were given tour of Texas Tech NWI Reese facilities.

Kishor Mehta