

MINUTES OF THE
MARICOPA ASSOCIATION OF GOVERNMENTS
BUILDING CODES COMMITTEE

November 18, 2009

Maricopa Association of Governments Office
Cholla Room
Phoenix, Arizona

COMMITTEE MEMBERS

Steven Hether, Mesa, Chair

Ken Sowers, Avondale

Phil Marcotte, Buckeye

*Mike Tibbett, Carefree

Mike Baxley, Cave Creek

A-Judy Hendrickson for Alex Banachowski,
Chandler

*Mary Dickson, El Mirage

*Peter Johnson, Fountain Hills

Robert Crum for Jo Rene DeVeau, Gila River
Indian Community

A-Ray Patten, Gilbert

Bryan Woodcox, Glendale

Bill King for Ed Kulik, Goodyear

*Chuck Ransom, Litchfield Park

*Tom Ewers, Maricopa County

Russ Louman for Bob Lee, Paradise Valley

A-Dennis Marks, Peoria

Jason Blakely for Tom Wandrie, Phoenix

A-Dean Wise, Queen Creek

Michael Clack, Scottsdale

A-Michael Williams, Tempe

*Mario Rochin, Tolleson

John Stigsell, Youngtown

Rick DeStefano, Wickenburg

Rus Brock, Home Builders Association

OTHERS IN ATTENDANCE

Heidi Pahl Bickart, MAG

Robert Palmer, Southwest Gas

Ken Kirschmann, Southwest Gas

Ward Gilbert, Gilbert Plumbing

Ray Schmidt, R&R Engineering

Robert Dumitrache, R&R Engineering

Steve Gross, MAG

Rob Rizzo, eTec

Alana Chavez, MAG

*Those members neither present nor
represented by proxy.

A-Those members participating via
audioconference

V-Those members participating via
videoconference

1. Call to Order

Steven Hether, Chair, called to order the November 18, 2009 meeting of the MAG Building Codes Committee (BCC) at 2:00 p.m.

2. Introductions

Voting members Dean Wise, Michael Williams, Dennis Marks, Ray Patten, and proxy Judy Hendrickson attended via telephone conference call. All members introduced themselves.

3. September 16, 2009 Meeting Minutes

It was moved by Ken Sowers, seconded by Phil Marcotte and unanimously recommended to approve the September 16, 2009 meeting minutes.

4. Call to the Audience

No comments were made from the audience.

5. Comments From the Committee

No comments were received.

6. Bathtub Overflows

Steven Hether said he wanted to continue the discussion of bathtub overflows. Ward Gilbert said he has watched the code hearings pertaining to bathtub overflows on television. Mr. Gilbert informed that the American Brass & Aluminum Foundry Inc. letter was not written with much intent to resolve the problem. He reminded the committee that the original letter was retracted and a new letter was issued. He said the new letter is available on the MAG web site. Mr. Gilbert said that Kohler and other manufacturers agreed that they did not have any defined standards or warranties on bathtub overflow. He reiterated that the overflow does not actually do anything.

Bill King said relative to the code hearings, P41 was passed as submitted by the committee so it will go to spring or fall hearings in Dallas. The next step is to see how industry representatives in the insurance companies and plumbing industry will react. Ward Gilbert mentioned that it could mean that the insurance companies file a class action law suit for fraud against the plumbing industry for all bathtub overflow claims that were issued over the past 20 years.

7. Structural Engineering and Solar Residential Photovoltaic Applications

Robert Dumitrache of R&R Engineering gave a presentation on structural engineering and solar residential photovoltaic (PV) applications. Mr. Dumitrache presented many images of damaged trusses. He presented sections of a report on Roof Structure and Condition. He said trusses fail over time. He said 18 to 20 percent of systems have issues. He noted that the solar industry wants to remove all barriers but they need to do this in a safe manner.

Dean Wise asked what other agencies are doing in this arena. Mr. Wise noted that in Queen Creek they are looking at the framing in a house and 85 percent of the time there are modifications that need to be made to accommodate solar PV installations. He noted that the MAG recommendation for solar PV applications may be outdated and needs to be revisited. Michael Clack said that when he was Chair, he tried to refer this issue to BI/PE Forum to work out the issues with the industry professionals and make a recommendation to the full committee. He noted that the SBCA president and Michael Neary were involved in BI/PE Forum discussions. Robert Dumitrache said the solar industry would like to not answer to this issue as they see it as a deal killer for them. Mr. Dumitrache said that SRP and APS are handing homeowners a document to sign off that the roof is good. He asked jurisdictions to address this issue. He said new solar companies are more problematic for solar installs. Michael Clack said the smaller solar companies are his concern. Robert Dumitrache said that R&R Engineering is teaching solar companies how to do their own audits.

Rick DeStefano asked what a typical engineering survey provided prior to install of PV system costs. Mr. Dumitrache replied \$600 and under. Mr. DeStefano asked if training Solar City staff was successful. Mr. Dumitrache said training is ongoing and has gone well, as newly trained professionals are now able to identify and document problems. Michael Clack asked if a cost of \$200-\$300 for an initial survey can increase if modifications arise. Mr. Dumitrache said yes the cost may increase but it would be part of the overall engineering costs as R&R Engineering charges a flat fee. Mr. Clack said other engineering firms are quoting costs of \$2,000 for an engineering survey for solar. Robert Dumitrache said they make every attempt to do wood to wood applications and he said most of the time the modifications are easy to do.

Steven Hether asked if the engineers are able to identify the root cause of problems in the field. Mr. Dumitrache replied yes. Mr. Hether asked if the homeowner can recover some of the cost incurred by a bad truss install. Robert Dumitrache replied that he works very closely with the homebuilder to rectify the situation.

Rick DeStefano asked if the slide on array and rail system, the tributary load for the center should be spread out so there are standoffs and jacks on each truss to reduce that load. Robert Dumitrache replied yes, staggering standoffs is good for a large system. He added that each case is evaluated on an individual basis.

Robert Crum asked if there was supporting data for Dean Wise's comment of 85 percent. Dumitrache replied that he said 18 percent. Mr. Dumitrache said there could be a potential increase in fees assessed by other engineering companies but that most engineering companies are fair with costs. He noted that the issue is about building safety not money.

Judy Hendrickson said there is a website link: <http://www.irecusa.org/index.php?id=94> and at the bottom of this home page there is a link in the middle to publications and reports. The Pace University Inspector Guidelines for PV Systems is at the bottom of that page. Page 15 of 31, or item #8, addresses array mounting and their recommendations. This is what Chandler is currently following for a guideline of when Chandler needs to require structural engineering for residential projects. Chandler requires engineering on all commercial installations.

Robert Dumitrache stated that the Pace University Inspector Guidelines for PV Systems is not effective as it could overstress the truss. He noted that broad generalizations about what a roof can and cannot withstand is not reasonable.

8. Electric Vehicle and Charging Infrastructure

Rob Rizzo explained that in August 2009, Electric Transportation Engineering Corporation (eTec), a subsidiary of ECOTality, Inc., was selected by the U.S. Department of Energy for a grant of approximately \$99.8 million to implement the largest deployment of electric vehicles and charging infrastructure in history. Mr. Rizzo stated that the eTec initiative proposes to deploy charging infrastructure in major population areas that include Phoenix (AZ), Tucson (AZ), and others. Rob Rizzo, eTec, provided an update on the implementation of electric vehicle charging infrastructure to prepare for the introduction of electric vehicles into the MAG region.

Rob Rizzo explained that eTec has met with the cities of Phoenix and Scottsdale to discuss the EV project and online permitting. He explained that there will be about 12,000 Level 2 EV chargers in Phoenix, about 900 residential chargers, as well as some Level 3 fast chargers along the I10 corridor. Mr. Rizzo discussed the EV microclimate area, a 5-10 square mile area with high concentration of chargers, and said that more information is available at www.EVproject.com. Rob Rizzo also announced the MAG EV Charging Infrastructure Workshop to be held December 10, 2009 from 9-11am in the MAG Saguaro room.

Rob Rizzo said he would like to look at permitting process for residential, commercial and fast chargers. He announced that they plan to have a prescreening process for residential owners of EV. He said some questions asked of homeowners include the age of dwelling, type of dwelling, attached or detached garage, etc. He said if a resident does qualify they would then need to pull a permit. He announced that they will be identifying their EV locations in March and will verify that locations can support a Level 2 or 3 charger. He said eTec has asked cities to look at guidelines so they understand what would be required to put an EV charger at residential and commercial locations. He said a load calculation will be necessary for a residential dwelling. He listed other requirements. He noted that eTec is looking for buy-in from cities and towns that already use online permitting as it would be easier for them to setup online permitting for EV infrastructure permit.

Mr. Rizzo explained the commercial permitting process noting that member agencies and eTec need to come to agreement on permitting, site plans, and the planning portion necessary to get a permit. He said they want to get an over-the-counter permit. He noted they want to satisfy people at the cities. He said eTec wants help expediting the municipal planning and permitting process.

Michael Clack said he attended the city of Scottsdale eTec meeting on EV infrastructure. Mr. Clack noted that with some minor modifications, Scottsdale may be able to set up a category specific to EV in their online permitting. He said complex commercial applications can have design considerations but can still be expedited. He added that building officials need a better understanding of the commercial application. Rob Rizzo said eTec will present some simple scenarios on December 10th for multi-family, single family and commercial buildings.

Michael Clack said there may need to be a change to a municipal zoning code to allow x number of parking spots with EV chargers. Michael Clack said he felt the market could follow the demand for EV.

Rob Rizzo said he would like a template or blueprint to be developed locally that other cities in the nation could use when implementing EV charge stations in their municipalities.

Steven Hether thanked Rob Rizzo for sharing his information on the EV project.

9. MAG Building Inspectors/Plans Examiners (BI/PE) Forum Update

Michael Clack said a new chairperson is needed for the BI/PE Forum. He noted that Scottsdale has a candidate, Dustin Schroff. He mentioned that Cheryl Mullis, past Chair, has discussed the role with Mr. Schroff.

Mr. Clack moved that Dustin Schroff of Scottsdale become the new Chair of the BI/PE Forum, Ken Sowers seconded and all members unanimously recommended to approve Dustin Schroff as Chair.

10. Updated MAG Building Codes Committee Membership

Members were encouraged to send any changes to Heidi Pahl Bickart. Steven Hether provided Tom Wandrie's new phone number. Bryan Woodcox noted that he is now the voting member for Glendale. Steven Hether said he had a correction to his e-mail address.

11. Update Survey of Code Adoption

Rus Brock said in talking with Ken Sowers he learned of jurisdictions adopting new codes as of July 1, 2010. Dean Wise said the law states that any subdivision platted or recorded before June 30th would use codes at that time and any subdivision or plat adopted after July 1, 2009 could use the new codes. Any time any of the codes used federal stimulus monies built into it, the new law did not apply. Members discussed meaning of new law and impacts to jurisdictions. Michael Clack said that Scottsdale is going forward with adoption of 2009 code in late summer or early fall of 2010 because green building and stimulus money would be applicable especially as to the energy codes. Dean Wise said the moratorium has to stop at some point, so it stops July 1, 2011. After 2011 you can apply the new codes to subdivisions.

12. Topics for Future Agendas

Ken Sowers said he was approached by Westmark Enterprises manufacturers' representative who would like to discuss fittings for gas piping, steel piping, etc. He provided further information to Steven Hether.

13. Adjournment

The meeting adjourned at 3:17pm.