Discontinuance of Paper Flood Insurance Rate Maps
Effective October 1, 2009 FEMA will discontinue the distribution of paper maps. The paper maps will be replaced with Digital Flood Insurance Rate Maps (DFIRMs). Replacing the paper map products with digital versions is more environmentally friendly and will improve the usability of FEMA’s flood hazard data. It also provides users with a more powerful tool for insurance activities and flood risk management.

Why are all of these changes being made?
The NFIP has implemented these changes in order to prepare for future flooding events and to lessen the burden on taxpayers of paying for future flood damage. To ensure the viability of the program it is necessary to have premium levels that correspond to the risk that is being assumed. Most insurance carriers impose annual rate increases on products such as auto insurance, homeowners insurance, etc. and some insurance carriers may refuse coverage to certain high risk prospects, in order to continue to thrive. However, unlike other forms of insurance, the NFIP, whose policies are sold through various insurance companies and agents, will not refuse to offer coverage as a result of multiple claims or any large sustained loss. The NFIP continues to provide reasonable rates to people who purchase flood insurance to protect their homes and businesses against the Nation’s number one natural disaster.

For more information about the NFIP, please visit [www.FloodSmart.gov](http://www.FloodSmart.gov). Please feel free to contact us with your questions or concerns at [info@femafloodsmart.com](mailto:info@femafloodsmart.com).

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Submit your own items or suggestions for future topics to column editor Rebecca Quinn, CFM, at [rcquinn@earthlink.net](mailto:rcquinn@earthlink.net). Comments welcomed!

Here’s Something You Might Find Interesting . . .
The NFIP regulations at §60.3(a)(3)(iv) specify that new construction and substantially improved buildings shall “be constructed with electrical, heating, ventilation, plumbing, and air conditioning equipment and other service facilities that are designed and/or located so as to prevent water from entering or accumulating within the components during conditions of flooding. In most buildings, this means utility service and equipment are elevated to or above the base flood elevation. The exception is the minimum electric service required to address life safety and electric code requirements for building access and storage areas.

Complying with the requirement to elevate utility service and equipment is reasonably straightforward when applied to all of the utility components and service equipment that are located inside of buildings, including the panelboard (sometimes call a breaker panel or distribution board). The panelboard (top photo) is a component of the electricity supply system which divides an electrical power feed into subsidiary circuits, while providing a protective fuse or circuit

Typical panelboard, located inside.

Typical electric meter, located outside.
breaker for each circuit. The panelboard is installed when the building is constructed and is owned by the property owner.

The component of the electricity supply system that is mounted on the outside of buildings is the electric meter (bottom photo). It is the device that measures the amount of electrical energy supplied to the home or business. Most electric meters are owned and installed by electric utility companies.

The most common electrical code enforced throughout the U.S. is NFPA 70, also known as the National Electrical Code (NEC) and published by the National Fire Protection Association (NFPA). It is a referenced standard in the International Building Code and the International Residential Code, which are the basis for most state building codes. Among the myriad provisions in the NEC is a requirement that meters be at least 65” above grade. If higher, a platform and access stairs must be provided.

Despite the NFIP regulation cited above, and the fact that local floodplain management ordinances in more than 20,800 communities all have the same provision, it is common to see electric meters below the BFE – at least in flood hazard areas where the base flood depth is more than about 5 feet deep. Why? Let’s ask – and answer – a couple of questions.

**Question 1. Do communities have authority to regulate the installation of electric meters, regardless of whether a building is in or out of a flood hazard area?**

Typically, no. In most states utility companies are not subject to the regulatory authority of local jurisdictions, but are regulated by a state entity such as a public service commission. In these states, regardless of how broad the NFIP regulations are (“development” is defined to include all activities in SFHAs), the location of electric meters, gas meters, and other equipment that is owned by the utility companies, is not subject to the requirements of local regulations nor the building codes.

Even in states where electric utility companies are not subject to local regulation, some communities have been able to encourage voluntary elevation of meters. However, changes in the technology used to read the meters may be changing those partnerships. Some code officials told me recently that companies are starting to use “drive-by” technology to read meters. And because the signals are more difficult to read when the meters are elevated, the companies not have stopped elevating meters, they have begun to to lower those that had been elevated.

I’m guessing at the next part of the answer, and that is that some states do require utility companies to be regulated by communities. If communities enforce NFPA 70 and either the flood provisions of the building codes or a floodplain management ordinance, then the more restrictive provisions should prevail and electric meters and gas meters should be installed at or above the BFE.

**Question 2. The residential code requires “electrical systems, equipment and components” to be elevated or protected, and the standard referenced by the building code, ASCE 24, has requirements for electric meters. If these codes are adopted at the state level and enforced by communities, do the requirements apply if utility companies are regulated by a Public Service Commission?**

No. The simple fact that state building codes have requirements for electric meters does not supersede separate state authority that exempts utility companies from regulation. In fact, the International Codes explicitly state that the provisions of the codes do not cover installations under the exclusive control of electric utilities.
Question 3. If the installation of electric meters is subject to local regulations (or if companies voluntarily elevate meters), how can the elevation requirements be satisfied when buildings are located in flood hazard areas?

The electrical code requires meters to be no more than 65” above grade unless a platform and stair access is provided. The photograph to the right shows several compliant elements, including the electric meter nearly 8 feet above grade with a platform and stairs (behind picket fence), the heatpump installed on a platform, and the fuel tank that has metal straps anchoring it to a concrete pad.

Question 4. How are the outside electric meters handled in your state and your community?

I’d like to hear from you if electric meters are subject to local regulation in your state. Every few years ASFPM asks state agencies assigned the responsibility to coordinate the NFIP to answer questions about floodplain management programs. The most recent summary of the responses is *Floodplain Management 2003: State and Local Programs*, which includes an appendix that contains numerous tables. A specific question was asked about activities exempt from local regulation, and 10 states indicated that public utilities are exempt. I think the number may be higher.

When I was Maryland’s State Coordinator, I remember having a conversation with someone at the state’s largest utility company about the thousands of electric and gas meters installed below the BFE. He said the economic benefits of easy access on a regular basis far outweighed the cost of having to replace meters if a low-probability flood event were to occur. In addition, the company was confident that its ability to restore power - and repair or replace meters - could be done faster than most houses would be reoccupied if the floodwaters ever got high enough to inundate the typical meter (65” above grade). I have to admit that I didn’t check with the company to see if they still held that position after Hurricane Isabel in 2003 caused flooding throughout much of the middle Chesapeake Bay. What’s your experience – have any utility companies changed their practices after a major flood?

[RCQ]

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**Washington Legislative Report**

Meredith R. Inderfurth, Washington Liaison  
Rebecca C. Quinn, Legislative Officer

**Congress To Be In Full Swing Through Mid-December**

The work of the Congress is proceeding at a dizzying pace, but a bumpy, erratic pace. In addition to the major national and international issues we are all aware of, there are many other issues being given attention, nominations to official positions being confirmed and appropriations matters being dealt with in one fashion or another.

The session is an unusually long one. The original target adjournment date was October 30th, but is now December 18th. By that time, it had been hoped there would be a completed energy and climate bill, but