PHMSA Excess Flow Valve/Curb Valve Rule Modification
Summary of EFV Rule Modification
(Pre-implementation meeting 1/31/2017)

- Review of changes
  - Multi, branch, small commercial (new/repl) services
  - Curb valve alternative and dual requirement in some regions
  - Notification to all customers of right to request EFV

- Issues
  - Payment of installation for existing customers
  - Method(s) of communication
  - Curb valve requirements (locally and federal)
  - Maintenance of valves
Rule Changes

- Review of changes

- Existing rule under 192.381 and 383 requires installation of Excess Flow Valves on SFRs with min. pressure of 10 PSI for new or replaced services.

- New rule (effective April 14) adds EFV to multi-family (<1000 CFH), branch line to SFR, small commercial (<1000 CFH) for all new/repl services. [this has been in place at Ngrid for a number of years in advance of regulation.]

- There are exceptions but those require curb valve as an alternative. Dual EFV and Curb Valve requirement in some regions, such as NYC.

- Notification to all customers of right to request EFV. Rate setter determines how and who pays the costs of the requested EFV. PHMSA has not included installation of EFVs on existing services in their cost estimate.
§ 192.383 Excess flow valve installation.

(b) Installation required. An EFV installation must comply with the performance standards in § 192.381. After April 14, 2017, each operator must install an EFV on any new or replaced service line serving the following types of services before the line is activated:

1. A single service line to one SFR;
2. A branched service line to a SFR installed concurrently with the primary SFR service line (i.e., a single EFV may be installed to protect both service lines);
3. A branched service line to a SFR installed off a previously installed SFR service line that does not contain an EFV;
4. Multifamily residences with known customer loads not exceeding 1,000 SCFH per service, at time of service installation based on installed meter capacity, and
5. A single, small commercial customer served by a single service line with a known customer load not exceeding 1,000 SCFH, at the time of meter installation, based on installed meter capacity.

(c) Exceptions to excess flow valve installation requirement. An operator need not install an excess flow valve if one or more of the following conditions are present:

1. The service line does not operate at a pressure of 10 psig or greater throughout the year;
2. The operator has prior experience with contaminants in the gas stream that could interfere with the EFV's operation or cause loss of service to a customer;
3. An EFV could interfere with necessary operation or maintenance activities, such as blowing liquids from the line; or
4. An EFV meeting the performance standards in § 192.381 is not commercially available to the operator.
§ 192.383 Excess flow valve installation

- (d) **Customer's right to request an EFV.** Existing service line customers who desire an EFV on service lines not exceeding 1,000 SCFH and who do not qualify for one of the exceptions in paragraph (c) of this section may request an EFV to be installed on their service lines. If an eligible service line customer requests an EFV installation, an operator must install the EFV at a mutually agreeable date. The operator's rate-setter determines how and to whom the costs of the requested EFVs are distributed.

- (e) **Operator notification of customers concerning EFV installation.** Operators must notify customers of their right to request an EFV in the following manner:
  1. Except as specified in paragraphs (c) and (e)(5) of this section, each operator must provide written or electronic notification to customers of their right to request the installation of an EFV. Electronic notification can include emails, Web site postings, and e-billing notices.
  2. The notification must include an explanation for the service line customer of the potential safety benefits that may be derived from installing an EFV. The explanation must include information that an EFV is designed to shut off the flow of natural gas automatically if the service line breaks.
  3. The notification must include a description of EFV installation and replacement costs. The notice must alert the customer that the costs for maintaining and replacing an EFV may later be incurred, and what those costs will be to the extent known.
  4. The notification must indicate that if a service line customer requests installation of an EFV and the load does not exceed 1,000 SCFH and the conditions of paragraph (c) are not present, the operator must install an EFV at a mutually agreeable date.
  5. Operators of master-meter systems and liquefied petroleum gas (LPG) operators with fewer than 100 customers may continuously post a general notification in a prominent location frequented by customers.
§ 192.383 Excess flow valve installation

(f) Operator evidence of customer notification. An operator must make a copy of the notice or notices currently in use available during PHMSA inspections or State inspections conducted under a pipeline safety program certified or approved by PHMSA under 49 U.S.C. 60105 or 60106.

(g) Reporting. Except for operators of master-meter systems and LPG operators with fewer than 100 customers, each operator must report the EFV measures detailed in the annual report required by § 191.11.
Manual Service Line Shut-off Valve Installation (49 CFR 192.385)

- (a) **Definitions.** As used in this section:

  Manual service line shut-off valve means a curb valve or other manually operated valve located near the service line that is safely accessible to operator personnel or other personnel authorized by the operator to manually shut off gas flow to the service line, if needed.

- (b) **Installation requirement.** The operator must install either a manual service line shut-off valve or, if possible, based on sound engineering analysis and availability, an EFV for any new or replaced service line with installed meter capacity exceeding 1,000 SCFH.

- (c) **Accessibility and maintenance.** Manual service line shut-off valves for any new or replaced service line must be installed in such a way as to allow accessibility during emergencies. Manual service shut-off valves installed under this section are subject to regular scheduled maintenance, as documented by the operator and consistent with the valve manufacturer's specification.
Communications and Payment

Communications

- Plan on using combination of electronic and mailer information
- First issue a general notice of rule change with follow up via web
- NE operating areas must be consistent across NE states due to NE consortium requirements.
- Customers will be directed to Call Center. Call Center will forward to Customer Fulfillment for cost details for qualified customers
- Need script
- Need to gather appropriate customer information as needed (Existing EFV, pressure, age of service, estimated cost)
Excess Flow Valve Notification

Did you know you can request installation of an Excess Flow Valve (EFV) on your existing gas service line under certain circumstances? For more information, call National Grid at 781-907-2958 or email.

Notification

Federal regulation 49 C.F.R. § 192.383(d) regarding gas pipeline safety requires National Grid to notify customers of their right to request installation of an Excess Flow Valve (EFV) on their existing gas service line under certain circumstances. An EFV is a mechanical safety device installed inside a gas service line between the gas main in the street and the gas meter. The EFV is designed to minimize the flow of natural gas in the event of a service line break. A potential benefit is, in the event that an excavator accidentally digs up the gas service line, the valve would operate to minimize or shut off the flow of gas.
* PHMSA requires that shutoff valves be installed as close to the main as practicable (per FAQ). In addition, there are periodic maintenance requirements for valve operation which must be met. State or municipal regulations apply for the installation of mandated service shut-off valves.
Excess Flow Valve/Curb Valve Installation Flow Chart - Customer Requests for EFV on Existing Services

SRF
Branched Service

>10 PSIG?
N
Y

Not commercially available

Diameter > 2”?
N
Y

Is service replacement (<= 2”) possible

Install EFV

No further action*

Multi-Family or Small Commercial Service

>1000 SCFH?
N
Y

>10 PSIG?
N
Y

Not commercially available

Diameter > 2”?
N
Y

Is service replacement (<= 2”) possible

Install EFV

No further action needed*

No further action*

* PHMSA requires that shutoff valves be installed as close to the main as practicable (per FAQ). In addition, there are periodic maintenance requirements for valve operation which must be met. State or municipal regulations apply for the installation of mandated service shut-off valves.
Open Issues

- State requirements are in addition to federal (ie, if curb valve required for loads <1000 CFH, EFV is still required)

- If operator installs both EFV and Curb valve to meet federal requirements, are maintenance requirements still in place for CV?

- What are interpreted extent of maintenance and operability requirements?
  - FAQ – What can be expected to be covered during “regular scheduled maintenance”?
  - PHMSA pointed operators to the language in the Preamble of the Final Rule. The operator should ensure that the valve is accessible, free of debris and is able to be turned and operated. PHMSA suggested that manufacturers could add additional maintenance requirements that should be incorporated in the maintenance activities.
  - Preamble states that operator should ensure that the valve is accessible, free of debris and is able to be turned and operated

- How to assess meter capacity? (We are transitioning from 800 to 1000 Meters)
Roundtable

Do you have additional state requirements for the installation of curb valves?
  a. If so, do you plan on installing both EFV and curb valves at those locations or will you provide specific instruction to your field personnel for the installation of either an EFV (if available) or a curb valve?
  b. If you plan on installing both, do you plan on meeting curb valve maintenance requirements in 192.385(c)?

Do you intend to periodically inspect or operate the curb valve? Y/N
  Only inspect and clear the valve box or Operate the valve?
  If so how often for each?

If operate the valve, how will you confirm that customer is not turned off.

How do you intend to restart customers that are turned off by operation of a curb valve?

If the valve manufacturer references 192.747 in their maintenance requirements, would you treat that curb valve as an emergency valve and “check and service” the valve annually, not to exceed 15 months? Y/N

Has your state provided any implementation guidance or compliance expectations for 192.385? Y/N
  If Yes, please describe:

Who will perform this work? (ie, many operators utilize separate field crews for service leak survey and valve maintenance and/or other service maintenance functions such as meter or regulator replacement)