than twenty percent of an entity with media interests would enable parties to violate existing local and regional concentration rules in some cases,[54] and to go undetected as media participants in others.[55] Those who have the capacity to use the airwaves and the power to influence public opinion should be known to the public and this Comission. Accordingly, if the Commission decides to raise existing benchmarks, it should require parties to report interests that fall short of the new level and should devise a means to detect violation of remaining ownership limitations.

One might be tempted to take some comfort in the fact that the Notice outlines a fairly broad range of options. A cursory reading of the Notice quickly makes plain, however, that most of the listed options are decorative only. For instance, it is difficult to credit the possibility that the Commission will adopt the *ad hoc* factor analysis described in paragraphs 23–24. That approach would produce nothing short of an administrative and business planning nightmare.[56] The Commission long ago recognized that ineluctable effect, and abandoned the practice of making individualized determinations of multiple ownership issues in favor of hard-and-fast rules on cognizable interests.[57] Furthermore, the suggestion that the FCC or the general public bear the burden of proving "actual control" under an *ad hoc* approach is particularly disingenuous from the standpoint of a continuing Commission commitment to furthering diversity of ownership, given the limited resources and incentives for "outsiders" to make such showings.

Maintenance of the *status quo*, another option identified, is theoretically possible but unlikely as a practical matter given the sanguine but largely rhetorical references of the Notice to the "dynamic," "rapid," "significant," and "competitive" changes that have occurred in telecommunications since the prevailing benchmarks were adopted.[58] However, in view of the paucity of data and analysis proffered to support the "tentative recommendations" of this NPRM, preserving the *status quo* may be the most rational of the posited alternatives.

February 7, 1983.

[54] For instance, under the approach outlined in the Notice, an entity seeking to control a newspaper and television station serving the same community in violation of the newspaper broadcast cross-ownership ban could easily do so without detection simply by holding either media outlet through six wholly-owned subsidiaries, five owning 19.9 percent each and the sixth owning the remaining .5 percent. The Notice's contention that such circumvention is possible even now completely overlooks the fact that such evasion would be extremely cumbersome, and therefore unlikely with a one percent benchmark. That would not be true if the attribution ceiling were lifted to fifteen or twenty percent.

[55] It is unclear, for example, how the Commission would be able to promote one of its primary broadcast licensing objectives—maximum diffusion of control—in the comparative hearing process if interests that are significant are not required to be reported.

[56] An *ad hoc* approach to attribution would sap our limited agency resources, inevitably produce inconsistent and arbitrary results, and make it virtually impossible for businesses to plan their endeavors with any reasonable degree of advance assurance.

[57] *See Multiple Ownership of Standard, FM and Television Broadcast Stations*, 45 FCC 1476, 1749 (1964); *Multiple Ownership of Standard, FM and Television Broadcast Stations*, 53 RR 2d 85, 89 (1975).

[58] It is "little more than wishful thinking to predicate a finding of 'workable competition' on new technology and services (e.g., DBS, Low Power TV, and fledgling STV and MDS) which are more on the horizon than with us here and now. In the final analysis, this Commission must have more than merely the *assumption* of a 'workably competitive' marketplace as the basis for policy making." Staff Report, FCC, *FCC Policy on Cable Ownership* 1, 1-2 (Nov. 1981) (Concurring Statement of Commissioner Joseph R. Fogarty).

Concurring Statement of Commissioner Anne P. Jones

In Re: Notice of Proposed Rulemaking on Attribution of Ownership Interests in Broadcast, Cable Television, and Newspaper Entities

There are a number of things about this Notice which trouble me, perhaps most especially the "tentative recommendations" in it, which I am not prepared to endorse. However, I agree that reexamination of these rules and policies may be worthwhile, so I concur in issuance of the Notice.

[FR Doc. 83-6216 Filed 3-9-83; 8:45 am]
BILLING CODE 6712-01-M

DEPARTMENT OF TRANSPORTATION

National Highway Traffic Safety Administration

Research and Special Programs Administration

49 CFR Part 192

[Docket No. PS-76; Notice 1]

Transportation of Natural and Other Gas by Pipeline; Monitoring of External Corrosion Control

AGENCY: Materials Transportation Bureau (MTB), DOT.

ACTION: Advance notice of proposed rulemaking.

SUMMARY: This notice invites comments on the problem of conducting electrical tests of cathodic protection systems and electrical surveys to determine areas of active corrosion. Compliance with current requirements is controversial for pipelines located in areas that are subject to stray electrical currents or beneath continuous paving. Comments received will be considered with a view to proposing specific changes to the existing requirements for monitoring of external corrosion control.

DATE: Interested persons are invited to submit written comments on this notice before June 8, 1983. Late filed comments will be considered so far as practicable. All interested persons must submit as part of their written comments all the supporting material that they consider relevant to any statement of fact made by them.

ADDRESS: Communications should be sent to the Dockets Branch, Materials Transportation Bureau, U.S. Department of Transportation, 400 Seventh Street, SW., Washington, D.C. 20590.

All comments and docket materials may be reviewed in the Dockets Branch, Room 8426, between the hours of 8:30 a.m. to 5:00 p.m. each working day.

FOR FURTHER INFORMATION CONTACT: Paul J. Cory, 202-426-2082, regarding the content of this notice, or the Dockets Branch, 202-426-3148, regarding copies of this notice or other information in the docket.

SUPPLEMENTARY INFORMATION:

Statement of the Problem

MTB has reviewed the requirements of § 192.465(a) that each pipeline that is under cathodic protection must be tested at least once each calendar year, but with intervals not exceeding 15 months, to determine whether the cathodic protection meets the requirements of § 192.463. A copy of the Regulatory Review Report is in the docket. At issue is the technical feasibility of making the necessary tests on pipelines under cathodic protection, as required by § 192.465(a), in areas where the pipeline is located beneath continuous paving or in areas where electrical stray currents interfere with cathodic protection measurements. The review was conducted in accordance with Executive Order 12291 as a part of MTB's program to review existing regulations and revoke or revise those that are not achieving their intended purpose. Consideration of the difficulties in meeting the requirements of § 192.465(a) also disclosed similar problems in meeting §§ 192.457(b)(3) and 192.465(e). Therefore, this rulemaking action to change § 192.465(a) also considers and seeks answers to related compliance problems associated with these other two sections.

Background

The American Society of Mechanical Engineers (ASME) Gas Piping Standards Committee on February 27, 1976, petitioned the Office of Pipeline Safety Operations (OPSO), predecessor to the Office of Pipeline Safety Regulation (OPSR), (Docket No. Pet. 76-5) to add a new paragraph to § 192.465, External corrosion control: Monitoring, to permit the use of annual leakage surveys, corrosion and leak history studies to verify and monitor the effectiveness of cathodic protection and other corrosion procedures.

The ASME contended that where pipelines are beneath paving, the reference electrode often cannot be placed in intimate electrical contact with the soil and readings taken with contact on the paving surface were often found to be invalid. Similarly, the ASME contended that electrical tests conducted on pipelines located in areas of stray current could not be relied upon as an indicator of the level of cathodic protection.

By a letter of September 15, 1976, OPSO denied that petition because the objective of the monitoring required by § 192.465 is to find and correct faulty cathodic protection in time to prevent corrosion leaks. The denied pointed out that use of the proposed alternatives of leak surveys and leak history studies are weak forms of preventive maintenance since they would be fruitful only after cathodic protection has become so ineffective that leaks are occurring. Particularly in paved areas, such leaks are more likely to be potentially hazardous to the safety of the public. In addition, OPSO was not convinced that electrical testing was impractical or ineffective for the reasons set forth in the petition. In its denial OPSO stated, "According to contract studies performed for this Office, the best indicator of effective corrosion control appears to be frequent monitoring and interpreting of pipe potentials." (Study report, Ferrous Pipeline Corrosion Processes, Detection, and Mitigation, October 1971, DOT-OS-A9-108).

In a meeting of the Technical Pipeline Safety Standards Committee (TPSSC) held in Washington, D.C., on January 17 and 18, 1978, the Committee recommended that OSPO institute rulemaking procedures to amend § 192.465. This proposal would permit the use of annual leakage surveys, and corrosion and leak history studies to verify and monitor the effectiveness of cathodic protection and other corrosion control procedures where it was found that electrical methods for evaluating and monitoring pipeline cathodic protection systems are impractical or are ineffectual. This would provide an alternative method for determining whether cathodic protection meets requirements of § 192.463 where the pipeline is located in areas such as (1) those congested with numerous buried metallic structures, (2) business and commercial areas where roadway and sidewalk paving exists between buildings on each side of the street, (3) where stray current effects are predominant, and (4) in lakes, rivers, and marsh lands.

The Committee gave as a reason for this recommendation that electrical tests will not always be effective in determining whether cathodic protection is effective and other means should be provided.

By a letter of August 28, 1978, OPSR dined this specific recommendation, citing the similarity to the February 27, 1976, petition of the ASME that is previously discussed and giving the same reasons. In reconsidering this recommendation, MTB believes that areas congested with numerous buried metallic structures would normally be included as part of the paved area being reviewed. In addition, MTB has no information to show that lakes, rivers, and marsh lands should be excepted from the requirements of § 192.465(a).

The continuing controversy involved over the requirements of testing the effectiveness of cathodic protection on pipelines under paving and in stray current areas prompted the Department to study the feasibility of applying testing techniques necessary to comply with § 192.465(a) in such areas.

This study, done by the Harco Corporation under Contract DTRS-5680-C-00004, completed in January 1982, was based on making electrical measurements on cathodically protected steel pipelines located in business or commercial areas where roadway and sidewalk paving exist between buildings on each side of the street and other underground metallic structures are buried and in areas where stray current effects are predominant.

In paved areas, four pipelines were selected that had other underground structures present as is considered typical of those found in distribution systems. These included pipelines that were:

1. Effectively coated with galvanic anode cathodic protection, located entirely under concrete paving;
2. Bare with galvanic anode cathodic protection, part under asphaltic macadam and part under asphalt on top of concrete paving;
3. Effectively coated with impressed current cathodic protection, mostly under an asphalt surface over brick and limestone but with a few areas having a concrete paving; and
4. Bare with impressed current cathodic protection, located under asphalt paving.

In all four paved locations, it was found that both asphalt and concrete paving influence the resultant pipe-to-soil measurements and that each material has a different effect. On asphalt, the resistance in the contact between the reference electrode and the paving was found to be the major consideration in obtaining pipe-to-soil voltage readings. On concrete, the effect of contact resistance was negligible, but other conditions introduced errors in the voltage potentials measured as explained below.

Conclusions to the Harco study pointed out that:

1. On all locations having asphalt pavement:

a. Potential measurements were often obtainable at cracks in the paving.

b. Potential measurement with the reference electrode placed on dry, well-sealed asphalt pavement were not possible.

c. With water poured on well-sealed, asphalt pavement, potential measurements were obtainable, but these potentials were obtained only where the water "bridged" the asphalt surface between the location where the reference electrode was placed to a crack in the asphalt or to an unpaved area. Where the water remained "local" on well-seal asphalt, a valid reading was not obtained.

d. When the entire asphalt pavement was wet (such as during or immediately after rain), readings were obtained without difficulty, but the exact meaning of the readings with respect to location of the reference electrode is in doubt.

2. Conclusions to the Harco study pointed out that on concrete pavement:

a. Apparently valid potential measurements taken with the reference electrode placed on concrete pavement were easily obtainable with instruments of high input resistance.

b. However, potentials taken with the reference electrode on concrete differed from those taken with contact to the soil at the same location through a drilled hole or an adjacent unpaved area. In most instances, the potential indicated on the concrete was more negative than the potential in the adjacent soil although the reverse condition was also seen.

c. Despite the error in potential readings introduced by concrete pavement on piplines with impressed current systems, the changes in potential (delta E) obtained when the rectifier unit was turned "off" and "on," were approximately the same on concrete and in soil at the same locations.

In areas of stray current, two pipelines were selected for study. Both pipelines, one in Pittsburgh, Pennsylvania, and the other in Berkeley, California, were being subjected to stray current resulting from the operation of public transit systems. Both pipelines were well coated. The Pittsburgh pipeline was protected by galvanic anode cathodic protection, and the Berkeley pipeline had an impressed current cathodic protection system. It was found that valid pipe-to-soil potentials could be obtained on both pipelines during nonrush hour periods either by use of a direct reading high resistance voltmeter or by use of a recording voltmeter.

Conclusions to the Harco study pointed out that in areas where stray currents are predominant:

1. Every situation is unique and must be dealt with in a manner which fits the particular condition encountered.
2. It is first necessary to overcome any possible adverse effects generated by that stray current (see 49 CFR 192.473(a)).
3. The fluctuations in pipe-to-soil potential will be proportional to the magnitudes of the stray currents.
4. Because the fluctuations in pipe-to-soil potentials are unpredictable in stray current areas, the only appropriate criterion listed in Appendix D of Part 192 that would be useable for those areas would be a negative voltage of at least 0.85 volts with reference to a saturated copper-copper sulfate half cell rather than using those criteria related to a change of voltage potential. However, these measurements can only be made during time periods when stray currents are minimal.

Review Determination

(a) Paved Locations

Harco's testing of cathodic protection on pipelines under paving verified the ASME contention that pipe-to-soil voltage readings were often not obtainable using surface contact, and when readings were obtained, they were often of little or no value in determiing the level of cathodic protection being provided. The only reliable readings that could be taken were obtained at cracks in the pavement or by boring holes through the pavement to permit contact with the soil.

Contrary to the ASME petition, Harco found that readings which were obtained using surface contact for pipelines under concrete paving were inconsistent and could not have a correction factor applied to obtain meaningful data.

As a result of the above, it is clear that tests required under § 192.465(a) on pipelines that are located where readings are only taken on the paving surface covering the pipeline cannot be relied upon to show compliance with § 192.463.

(b) Stray Current Areas

Testing of cathodic protection on pipelines in stray current areas done by Harco verified the ASME Committee contention that reliable pipe-to-soil voltage readings were often difficult to obtain. However, on the two pipelines tested, it was found that meaningful test data could be obtained if taken during nonrush hour periods when the d.c. transit systems were operating at a minimum level.

To determine the extent of the d.c. transit systems that were likely to effect stray currents, MTB contacted the Urban Mass Transportation Administration who advised that there were only 10 such systems in the major cities of the United States. MTB then determined by telephone calls to the 10 transit systems that six such systems have periods when no trains are operating. The four other systems (Chicago, Newark, New York, and Philadelphia) have late night schedules with sufficient time between trains that in most locations the stray currents due to electric transit systems would be periodically reduced to a level that would permit meaningful electrical tests to be conducted on pipeline cathodic protection systems.

It must be recognized that all stray current areas do not result from subways and electric trains as was the case with the two pipelines tested. There are many different sources of stray currents, including the cathodic protection systems of other pipelines and underground cables, that do not necessarily drop to such low levels as experienced in the Pittsburgh and Berkely tests. Particularly in the crowded subsurface of streets in major cities, there are areas that experience fluctuating stray currents from multiple sources of varying characteristics. The ASME petition states that in these areas it is impossible to obtain meaningful data from the test required by § 192.465(a). This may be true of some pipelines where no action has been taken to comply with § 192.473(a), External corrosion control: Interference currents. However, where stray currents have been appropriately controlled by such steps as isolation or in some cases bonding, effective and meaningful electrical tests usually can be obtained to determine the level of corrosion control.

As a result of the above, MTB believes that § 192.465(a) can be met on most pipelines in areas of stray current where steps have been taken to control the detrimental effects of stray currents as required by § 192.473(a). In order to monitor the effectiveness of steps taken to minimize the adverse effects of stray currents under the program required by § 192.473(a), MTB would propose the use of other measures, such as Beta curves and Beta profiles under § 192.465(a) for this purpose.

In the regulatory review process OPSR concluded that one possible alternative to the present requirements of § 192.465(a) was to permit the use of more frequent leak surveys or corrosion and leak history records to be used to determine the effectiveness of corrosion control systems in lieu of electrical tests. This would only be permitted where an operator demonstrates that electrical tests are not technically or economically practicable for (a) pipelines under paving, or (b) after the steps required to minimize the effects of stray current under § 192.473(a) have been taken, tests are still impracticable.

As pointed out in the Harco study, there are paving inserts available that are now used by some operators at a few selected locations to permit tests to be conducted to evaluate cathodic protection systems. To install such inserts in streets and sidewalks in quantity may be costly from both the original costs and maintenance standpoints. OPSR believes that this would be one of the more appropriate methods of complying with the requirements of §§ 192.465(a) and 192.469 in many areas.

Cathodic protection is widely accepted by the operators of underground metallic systems (including oil, gas, and water pipelines and electric and telephone cables) as the best method available to prevent corrosion and resulting leaks or other damage. The electrical tests required for gas pipelines under § 192.465(a) are similarly accepted for determining that cathodic protection systems are operating satisfactorily on other underground metallic structures. This is a preventive measure designed to keep leaks from occurring. There are many locations where electrical tests cannot be conducted effectively by methods normally used. Due to the extraordinary effort required to obtain proper electrical data from tests on pipelines located under paving and in some stray current areas, as contended by the ASME and confirmed generally by the Harco study, it is obvious that some alternative method of checking such areas may be needed because of the high cost of compliance.

OPSR Comment

The requirements for testing a cathodic protection system and for conducting an electrical survey to detect areas of active corrosion are generally valid; however, MTB recognizes that their accomplishment may not always be practicable. Impracticability of electrical tests or surveys must be demonstrated with written documentation of test studies, or documented past experience of the operator with electrical surveys for pipelines in the system that have a similar environment.

It seems inappropriate to amend the requirement for monitoring cathodic protection by suggesting ways that do not monitor the effectiveness of cathodic protection except after failure. However, a leak survey and corrosion and leak records often appear to be the only economically practical alternative available. Although a leak survey does not detect the failure of the cathodic protection system, it does detect the leakage which results from corrosion of the unprotected pipeline.

To assist in the selection of an appropriate alternative course of action where testing of cathodic protection and conducting electrical surveys to detect areas of active corrosion have been demonstrated to be invalid, MTB invites interested persons to participate in this rulemaking by responding to the questions which follow and submitting any substantiating information. These questions are intended to apply to both gas transmission and distribution pipelines. If comments are made for only transmission or distribution pipelines, comments should identify which, or if combined so state. Where there are significant differences, data should be submitted separately for transmission or distribution pipelines. In figuring the costs requested, consider all wages, instruments, tools, other equipment and vehicles, and overhead. Do not consider maintenance to the cathodic protection system, except on questions where this is requested. In basing costs on miles of main, also include any related costs resulting from connected service lines. Do not consider the length of services in the miles figure.

1. Describe what you consider must be done to prepare for and conduct an electrical survey to determine areas of active corrosion for the first time on an existing, unprotected gas pipeline. (§§ 192.457(b)(3) and 192.465(e))

2. What is the average annual cost of conducting electrical surveys to determine areas of active corrosion under § 194.465(e):

a. On a gas pipeline with minor or no paving or stray currents:

(i) The first time, when electrical isolation is done, test leads installed, etc.? ($/mile of pipeline)

(ii) Subsequent surveys? ($/mile of pipeline)

b. In paved areas where drilling of pavement is used:

(i) The first time, when electrical isolation is done, test leads installed, etc.? ($/mile of pipeline)

(ii) Subsequent surveys? ($/mile of pipeline)

c. In stray current areas requiring special measures, such as nighttime or weekend field testing and/or use of recording voltmeters? ($/mile of pipeline)

3. Should § 192.465(a) include a reference to the use of Beta curves and Beta profiles as a means of determining the effectiveness of measures taken to mitigate the adverse effects of stray currents during peak periods?

4. Describe how you interpret data from electrical surveys or by other means to determine areas of active corrosion. (§§ 192.457(b) and 192.465(e))

5. When you dig up pipe in areas where active corrosion is indicated by electrical survey and other data, what percent of the instances do you actually find active corrosion? (§§ 192.457(b) and 192.465(e))

6. Under § 192.465(e), in areas where an electrical survey is impractical, what are the methods used to determine areas of active corrosion from study of corrosion and leak history records, leak detection survey, or other means?

a. If there are significant ways such means are applied or interpreted, please explain for each method.

b. Provide pertinent cost data for each. ($/mile of pipeline)

c. What are frequencies for each study, survey, or other method?

7. Describe how you conduct tests under § 192.465(a) to determine whether cathodic protection meets the requirements of § 192.463.

8. What is the annual cost of conducting electrical tests under § 192.465(a) to determine whether the cathodic protection meets the requirements of § 192.463:

a. On a gas pipeline with minor or no paving or stray currents? ($/mile of pipeline)

b. In paved areas where, in the absence of inserts, drilling of pavement is used? ($/mile of pipeline)

c. In stray current areas requiring special measures, such as night time or weekend field testing and/or use of recording voltmeters? ($/mile of pipeline)

d. An anode installations made at corrosion repairs under § 192.483(c) (average $/location); and under the sampling category of § 192.465(a)? ($/mile of pipeline)

9. Under what conditions should monitoring be considered as causing extreme hardship and expense for tests required by § 192.465(a)? Specifically, for installations made under § 192.483(c)?

10. What would be the cost burden of having to keep a written record demonstrating that electrical surveys are impractical on a given pipeline? ($/mile of pipeline) (§§ 192.457(b)(3) and 192.465(e))

11. If recording voltmeters are used, what is their capital cost? ($/unit)

12. What is the cost of installing access to the soil beneath paved areas (pavement inserts, etc.) as needed in areas of continuous paving:

a. For one insert? ($/insert)

b. For the conducting of electrical tests under § 192.465(a)? ($/mile of pipeline)

c. For the conducting of electrical surveys under § 192.465(e)? ($/mile of pipeline)

d. If pavement inserts are not installed, how is access to the soil obtained? ($/location)

13. Where access to the soil beneath paved areas (pavement inserts, etc.) and test stations required by § 192.469 have been installed, what would be the cost of conducting:

a. Electrical tests under § 192.465(a)? ($/mile of pipeline)

b. Electrical surveys under §§ 192.457(b) or 192.465(3)? ($/mile of pipeline)

14. Are there any feasible alternative methods to the use of electrical tests for determining the level of cathodic protection on a pipeline that is located beneath paving other than using leak surveys, corrosion and leak history studies? What are their associated costs? ($/mile of pipeline) (§ 192.465(a))

15. Describe locations, other than paved areas or some stray current areas, where electrical surveys might be considered impractical. (§§ 192.457(b) and 192.465(e))

16. Considering the design life of anodes installed on unisolated segments of pipeline, is 1 year a reasonable time interval between electrical tests at such

anodes from a maintenance and safety cost/benefit basis? If not, what interval should apply? Explain. Please differentiate between urban and rural locations.

17. Should there be a requirement other than § 192.469 for installation of a permanent test station on cathodically protected pipelines at locations where a minimal response to cathodic protection is detected or otherwise believed to exist on cathodically protected pipelines in paved areas and stray current areas? Explain.

18. What is the life expectancy of a test station, and what is the estimated capital costs for test stations? ($/mile of pipeline)

19. What is the average cost of repairing ineffectively operating cathodic protection systems? ($/mile of pipeline)

20. What is the average cost of leak surveys in paved areas? ($/mile of pipeline)

21. How frequently should leak surveys be run to serve as an alternative to annual electrical tests under § 192.465(a)?

22. What is the average cost of repairing leaks in paved areas? ($/repair)

23. If a cathodic protection system is not operating effectively (i.e., active corrosion is present), on average, how long do you think it will be before a corrosion leak occurs? (——— years?)

24. Are there areas where the potential for developing faults in cathodic protection systems are less than normal that would justify a longer interval between tests of the cathodic protection systems than the current requirements? If yes, describe any such areas and state intervals considered appropriate.

25. What percent of the cathodic protection systems tested under § 192.465(a) are found to be operating effectively?

26. At the Technical Pipeline Safety Standards Committee meeting in Washington, D.C., on November 17, 1982, one pipeline operator suggested that an operator be permitted to increase the time interval between tests of a cathodic protection system under § 192.465(a) to 2 years if that system has been tested and found to be operating satisfactorily for two consecutive years. Systems found to have failed would have to be repaired and then if subsequently found to be operating effectively for two consecutive years could be placed on a 2-year test interval. What would be the effect of such a program on your system? How would this change your costs per mile of monitoring cathodically protected pipelines? ($/mile of pipeline)

List of Subjects in 49 CFR Part 192

Pipelines.

(49 U.S.C. 1672, Section 203, Pub. L. 96-129, 93 Stat. 1004 (49 U.S.C. 2002); 49 CFR 1.53, Appendix A of Part 1 and Appendix A of Part 106)

Issued in Washington, D.C., on March 2, 1983.

Richard L. Beam,

Associate Director for Pipeline Safety Regulation, Materials Transportation Bureau.

[FR Doc. 83-5844 Filed 3-9-83; 8:45 am]
BILLING CODE 4910-60-M

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49 CFR Part 571

[Docket No. 83-01; Notice 1]

Evaluation Report on Federal Motor Vehicle Safety Standard No. 105; Hydraulic Brake Systems

AGENCY: National Highway Traffic Safety Administration (NHTSA): DOT.

ACTION: Requests for comments.

SUMMARY: This notice announces the publication by NHTSA of a preliminary Evaluation Report concerning Safety Standard No. 105, Hydraulic Brake Systems. This staff report evaluates the safety effectiveness and costs of two major improvements in the design of passenger car brakes: dual master cylinders and front disc brakes. The report was developed in response to Executive Order 12291, which provides for government-wide review of existing major Federal regulations. The Agency seeks public review and comment on this evaluation. Comments received will be used to complete the review required by Executive Order 12291.

DATE: Comments must be received no later than: May 9, 1983.

ADDRESSES: Interested persons may obtain a copy of the report free of charge by contacting Mr. Robert Hornickle, Office of Management Services, National Highway Traffic Safety Administration, Room 4423, 400 Seventh Street, S.W., Washington, D.C., 20590 (202-426-0874). All comments should refer to the docket and notice number of this notice and be submitted to: Docket Section, Room 5109, Nassif Building, 400 Seventh Street, SW., Washington, D.C. 20590. (Docket hours, 8:00 a.m.-4:00 p.m., Monday through Friday.)

FOR FURTHER INFORMATION CONTACT: Mr. Frank G. Ephraim, Director, Office of Program Evaluation, Plans and Programs, National Highway Traffic Safety Administration, Room 5212, 400 Seventh Street, SW., Washington, D.C. 20590, (202-426-1574).

SUPPLEMENTARY INFORMATION: Safety Standard No. 105 (49 CFR 571.105) requires that passenger cars have a dual braking system and contains specifications for stopping performance under a variety of normal and adverse conditions. The purpose of a dual braking system is to provide a back-up braking capability in the event of a hydraulic failure. The two most significant changes in brake design of the 1960's and 70's were the introduction of dual master cylinders and front disc brakes. Dual master cylinders are the principal hardware element of a dual braking system. Disc brakes are not required by Standard 105, but they do make it easier for a car to meet the standard's stopping tests simulating brake fade and water immersion; in addition, they improve a car's handling during brake applications.

Pursuant to Executive Order 12291, NHTSA recently conducted an evaluation of dual master cylinders and front disc brakes to determine the effectiveness of the technology selected by the manufacturers in preventing accidents, deaths and injuries and to determine the costs of the technology to consumers. Under the Executive Order, agencies are to review existing regulations to determine whether the regulations are achieving the Order's policy goals, i.e., achieving legislative goals effectively and efficiently and without imposing any unnecessary burdens on those affected. This preliminary evaluation, however, is limited to dual master cylinders and disc brakes and does not deal with other aspects of Standard 105.

The principal findings and conclusions of the report are the following:

- Dual master cylinders are effective in reducing the number of accidents due to defective brakes. They eliminate 40,000 accidents per year, resulting in an estimated reduction of 260 fatalities, 24,000 injuries and $132 million in property damage (in 1982 dollars).
- Dual master cylinders add $17 to the cost of purchasing and operating a car over its lifetime (in 1982 dollars).
- Front disc brakes are effective in reducing the number of accidents due to defective brakes. They eliminate 9,800 accidents per year, resulting in an estimated reduction of 64 fatalities, 5,700