#### **DEPARTMENT OF TRANSPORTATION**

National Highway Traffic Safety Administration (NHTSA)

49 CFR Part 531

[Docket No. 96-085; Notice 1]

Passenger Automobile Average Fuel Economy Standards; Proposed Decision To Grant Exemption

**ACTION:** Proposed decision.

SUMMARY: This proposed decision responds to a petition filed by Rolls-Royce Motors, Ltd. (Rolls-Royce) requesting that it be exempted from the generally applicable average fuel economy standard of 27.5 miles per gallon (mpg) for model years 1998 and 1999 and that a lower alternative standard be established. In this document, NHTSA proposes that the requested exemption be granted and that an alternative standard of 16.3 mpg be established for MYs 1998 and 1999 for Rolls-Royce.

**DATES:** Comments on this proposed decision must be received on or before October 21, 1996.

ADDRESSES: Comments on this proposal must refer to the docket number and notice number in the heading of this notice and be submitted, preferably in ten copies, to: Docket Section, Room 5109, National Highway Traffic Safety Administration, 400 Seventh Street, S.W., Washington, DC 20590. Docket hours are 9:30 a.m. to 4 p.m., Monday through Friday.

FOR FURTHER INFORMATION CONTACT: The following persons at the National Highway Traffic Safety Administration, 400 Seventh Street, S.W., Washington, D.C. 20590:

For non-legal issues: Mr. P.L. Moore, Motor Vehicle Requirements Division, Office of Market Incentives, National Highway Traffic Safety Administration, 400 Seventh Street SW, Washington, DC 20590, (202) 366–5222.

For legal issues: Otto Matheke, Office of the Chief Counsel, NCC–20, telephone (202) 366–5253, facsimile (202) 366–3820.

#### SUPPLEMENTARY INFORMATION:

Statutory Background

Pursuant to 49 U.S.C. section 32902(d), NHTSA may exempt a low volume manufacturer of passenger automobiles from the generally applicable average fuel economy standards if NHTSA concludes that those standards are more stringent than the maximum feasible average fuel economy for that manufacturer and if

NHTSA establishes an alternative standard for that manufacturer at its maximum feasible level. Under the statute, a low volume manufacturer is one that manufactured (worldwide) fewer than 10,000 passenger automobiles in the second model year before the model year for which the exemption is sought (the affected model year) and that will manufacture fewer than 10,000 passenger automobiles in the affected model year. In determining the maximum feasible average fuel economy, the agency is required under 49 U.S.C. 32902(f) to consider:

(1) Technological feasibility;

(2) Economic practicability;(3) The effect of other Federal motor vehicle standards on fuel economy, and

(4) The need of the United States to conserve energy.

Section 32902(d)(2) permits NHTSA to establish alternative average fuel economy standards applicable to exempted low volume manufacturers in one of three ways: (1) A separate standard for each exempted manufacturer; (2) a separate average fuel economy standard applicable to each class of exempted automobiles (classes would be based on design, size, price, or other factors); or (3) a single standard for all exempted manufacturers.

Background Information on Rolls-Royce

Rolls-Royce is a small company concentrating wholly on the production of high quality, prestigious cars. Rolls-Royce markets cars under the Bentley and Rolls-Royce nameplates and currently seeks an exemption for both Bentley and Rolls-Royce cars. The annual production rate for these cars is less than 2,500 automobiles, of which one-third are sold in the United States. The corporate philosophy concentrates on this limited production as the only way to maintain their reputation for producing what is widely perceived as the best car in the world. It believes that its customers will continue to demand substantial cars, craftsman-built, using traditional materials and equipped to the highest standards. Rolls-Royce operates as an independent unit within the Vickers group of companies and is required to generate its own financial resources. The limited financial resources of this small company and its market position preclude Rolls-Royce from improving fuel economy by any means involving significant changes to the basic concept of a Rolls-Royce car.

Fuel economy improvements are particularly difficult in the short run. Rolls-Royce traditionally manufactures its own engine and bodies and is a very low volume manufacturer. Because of

this integration of component manufacturing and low volume, model changes are much less frequent than with larger manufacturers. Rolls-Royce may manufacture a body shell for fifteen years before making a major change. The opportunities for improving fuel economy through changing the model mix are also quite limited as Rolls-Royce manufactures only one basic model in different configurations and all have similarly low fuel economy.

Rolls-Royce's ability to make long term fuel economy improvements is also very limited. Any change in the basic concept of its cars to reduce size or downgrade the specifications would not, according to the petitioner, be acceptable to its customers.

Nevertheless, Rolls-Royce states that it is making every effort to achieve the lowest possible fuel consumption consistent with meeting emission, safety, and other standards while maintaining customer expectations of its product. In the 18-year period from 1978, when Federal fuel economy standards were introduced, Rolls-Royce has achieved fuel economy improvements by substituting lighter weight components and tuning its powertrain while leaving basic features of the vehicles unchanged.

Rolls-Royce states that technical innovation and switching to lighter weight materials should result in worthwhile improvements in its vehicles. The company believes that it has been conscious of the need for weight saving for many years, and since the introduction of the Silver Shadow, has made many parts of aluminum. These include the engine block and cylinder heads, transmission and axle casings, doors, hood and deck lid.

In addition to discussing opportunities for weight reduction, Rolls-Royce also included in its petition discussions of improving its fuel economy through mix shifts, engine improvements, and drive train and transmission improvements.

Rolls-Royce's Petition

On December 15, 1995, Rolls-Royce petitioned NHTSA for an exemption from the average fuel economy standards for vehicles to be manufactured by Rolls-Royce in model years (MYs) 1998 and 1999. The petition also requested an alternative standard be established, not to exceed 16.3 mpg, for each model year, 1998 and 1999. A number of petitions have been filed by Rolls-Royce covering all model years from 1978. The last was submitted in November 1994, which resulted in Rolls-Royce being granted an exemption

from the generally applicable fuel economy standard for MY 1997.

Methodology Used to Project Maximum Feasible Average Fuel Economy Level for Rolls-Royce

#### Baseline Fuel Economy

To project the level of fuel economy which could be achieved by Rolls-Royce in MYs 1998 and 1999, the agency considered whether there were technical or other improvements that would be feasible for these Rolls-Royce vehicles, whether or not the company currently plans to incorporate such improvements in those vehicles. The agency reviewed the technological feasibility of any changes and their economic practicability.

NHTSA interprets "technological feasibility" as meaning that technology which would be available to Rolls-Royce for use on its MYs 1998 and 1999 automobiles, and which would improve the fuel economy of those automobiles. The areas examined for technologically feasible improvements were weight reduction, engine improvements, and drive line improvements.

The agency interprets "economic practicability" as meaning the financial capability of the manufacturer to improve its average fuel economy by incorporating technologically feasible changes to its MYs 1998 and 1999 automobiles. In assessing that capability, the agency has always considered market demand since it is an implicit part of the concept of economic practicability. Consumers need not purchase what they do not want.

In accordance with the concerns of economic practicability, NHTSA has considered only those improvements which would be compatible with the basic design concepts of Rolls-Royce automobiles. NHTSA assumes that Rolls-Royce will continue to produce a five-passenger luxury car. Hence, design changes that would make the cars unsuitable for five adult passengers with luggage or would remove items traditionally offered on luxury cars, such as air conditioning, automatic transmission, power steering, and power windows, were not examined. Such changes to the basic design could be economically impracticable since they might well significantly reduce the demand for these automobiles, thereby reducing sales and causing significant economic injury to the low volume manufacturer.

#### Mix Shift

Rolls-Royce has little opportunity for improving fuel economy by changing the model mix since it makes only one

basic model in various configurations, all with similarly low fuel economy. The differences in fuel economy values among the different models available in MYs 1998 and 1999 will likewise be small. For the 1998 and 1999 model years, Rolls-Royce and Bentley cars will fall into five fuel economy configurations, three from the naturally aspirated engine family and two from the turbocharged engine family. The differences in fuel economy values between the different models are small, and the models with the lower projected fuel economies have significantly lower projected volumes. The Rolls-Royce model mix is essentially fixed by the market demand, and variations in sales percentages between the models would produce negligible improvement in CAFE.

### Weight Reduction

Rolls-Royce is conscious of the need to improve automotive fuel economy of its passenger vehicles. For MYs 1998 and 1999, aerodynamic improvements to the basic Rolls-Royce platform are expected to yield some fuel economy benefits. However, Rolls Royce, being a small manufacturer of prestigious automobiles, cannot afford to change the design of its cars by downsizing since its customers desire traditional size cars.

## Engine and Drivetrain Improvements

Rolls Royce has a tradition of attempting to reconcile improved fuel economy with its limited technical resources and a need for powerplants suitable for large heavy cars. Past developmental activities include test and evaluation of various technologies applied to the Rolls-Royce engine. These included the Texaco Controlled Combustion system, the Honda Compound Vortex Controlled Combustion system, diesel engines, cylinder disablement, increased engine displacement (to reduce NO<sub>X</sub> emissions and permit timing for improved fuel economy), the May "Fireball" combustion chamber, and overall downsizing of the engine and car incorporating all new features including bodyshell, engine, transmission, and suspension. Each of these approaches was discarded in turn as failing to provide a feasible option for simultaneously meeting fuel economy and emission requirements, and exacting customer expectations.

For MYs 1998 and 1999, Rolls-Royce intends to implement several engine and drivetrain improvements. Changes to the induction and exhaust systems will produce greater efficiency. Other planned improvements will lower friction losses and further enhance fuel

economy. Modified transmission shift patterns and torque converter characteristics will also result in improved economy. However, because of the nature of Rolls Royce automobiles and the need to retain large displacement engines, the fuel economy gains expected will not be large.

#### Effect of Other Motor Vehicle Standards

The Rolls-Royce petition cites several emission and safety standards as having a significant impact on its ability to improve fuel economy. As with other low volume manufacturers, the demands of meeting these standards place a strain on Rolls Royce's relatively limited technical resources.

Calfiornia emission regulations for the 1998 model year will require Rolls Royce and Bentley cars to meet new "enhanced" evaporative emission standards for all models. Meeting these new requirements will require substantial revisions to the fuel and emission control systems along with the introduction of an onboard diagnostic leak detection system, increasing vehicle weight and reducing fuel economy. Rolls Royce also contends that changes to the Federal Emission Test Procedures for the 1998 model year will also have a negative impact on fuel economy, particularly for the heavier models.

The Rolls Royce petition also claims that compliance with safety standards will impair its ability to improve fuel economy. In particular, Rolls Royce indicates that compliance with FMVSS 208 (Occupant Crash Protection) continues to impose fuel economy costs by forcing some models to move into a higher test weight class. Rolls Royce also contends in its petition that 49 CFR Part 581 (energy absorbing bumpers) and FMVSS 214 (side intrusion beam in doors) will also have fuel economy impacts for the 1998 and 1999 model years. Rolls-Royce is a small company, and engineering resources are limited, and priority must be given to meeting mandatory standards to remain in the marketplace. Conflict often exists between the priority of meeting standards and the need to remain competitive.

## The Need of the United States To Conserve Energy

The agency recognizes there is a need to conserve energy, to promote energy security, and to improve balance of payments. However, as stated above, NHTSA has tentatively determined that it is not technologically feasible or economically practicable for Rolls-Royce to achieve an average fuel economy in MYs 1998 and 1999 above

16.3 mpg. Granting an exemption to Rolls-Royce and setting an alternative standard at that level would result in only a negligible increase in fuel consumption and would not affect the need of the United States to conserve energy. In fact, there would not be any increase since Rolls-Royce cannot attain those generally applicable standards. Nevertheless, for illustrative purposes the agency estimates that the additional fuel consumed by operating the MYs 1998 and 1999 fleet of Rolls-Royce vehicles over their operating lifetime at the company's projected CAFE of 16.3 mpg (compared to an hypothetical 27.5 mpg fleet) is 115,959 barrels of fuel. This averages about 15.9 bbls. of fuel per day over the 20-year period that these cars will be an active part of the fleet. Obviously, this is insignificant compared to the daily fuel used by the entire motor vehicle fleet which amounts to some 4.8 million bbls. per day for passenger cars in the U.S. in

## Maximum Feasible Average Fuel Economy for Rolls-Royce

This agency has tentatively concluded that it would not be technologically feasible and economically practicable for Rolls-Royce to improve the fuel economy of its MYs 1998 and 1999 automobiles above an average of 16.3 mpg, that compliance with other Federal automobile standards would not adversely affect achievable fuel economy beyond the amount already factored into Rolls-Royce's projections, and that the national effort to conserve energy would not be affected by granting the requested exemption and establishing an alternative standard. Consequently, the agency tentatively concludes that the maximum feasible average fuel economy for Rolls-Royce in MYs 1998 and 1999 is 16.3 mpg.

# Proposed Level and Type of Alternative Standard

The agency proposes to exempt Rolls-Royce from the generally applicable standard of 27.5 mpg and to establish an alternative standard for Rolls-Royce for MYs 1998 and 1999 at its maximum feasible average fuel economy of 16.3 mpg. NHTSA tentatively concludes that it would be appropriate to establish a separate standard for Rolls-Royce for the following reasons. The agency has already established (60 FR 47877) an alternate standard of 17.0 mpg for MedNet, Inc. for MYs 1996, 1997, and 1998. Therefore, the agency cannot use the second (class standards) or third (single standard for all exempted manufacturers) approaches for MY 1998. The agency also anticipates that it

will receive petitions from other manufacturers seeking alternate standards for MY 1999. NHTSA tentatively concludes that the use of class standards or a single standard for all manufacturers would not provide sufficient flexibility for those manufacturers the agency anticipates will be filing petitions for MY 1999. Given the limited resources of these small manufacturers and their relative lack of ability to make significant changes to their product lines over the short term, the agency believes that establishing alternative standards for individual manufacturers is the most appropriate course of action for the 1999 model year. Accordingly, NHTSA is proposing that an alternate standard be established for Rolls Royce in MY 1999.

## Regulatory Impact Analyses

NHTSA has analyzed this proposal and determined that neither Executive Order 12866 nor the Department of Transportation's regulatory policies and procedures apply. Under Executive Order 12866, the proposal would not establish a "rule," which is defined in the Executive Order as "an agency statement of general applicability and future effect." The proposed exemption is not generally applicable, since it would apply only to Rolls-Royce, Inc., as discussed in this notice. Under DOT regulatory policies and procedures, the proposed exemption would not be a 'significant regulation.'' If the Executive Order and the Departmental policies and procedures were applicable, the agency would have determined that this proposed action is neither major nor significant. The principal impact of this proposal is that the exempted company would not be required to pay civil penalties if its maximum feasible average fuel economy were achieved, and purchasers of those vehicles would not have to bear the burden of those civil penalties in the form of higher prices. Since this proposal sets an alternative standard at the level determined to be Rolls-Royce's maximum feasible level for MYs 1998 and 1999, no fuel would be saved by establishing a higher alternative standard. NHTSA finds that, because of the minuscule size of the Rolls-Royce fleet, incremental usage of gasoline by Rolls-Royce's customers would not affect the United States's need to conserve gasoline. There would not be any impacts for the public at large.

The agency has also considered the environmental implications of this proposed exemption in accordance with the National Environmental Policy Act and determined that this proposed exemption, if adopted, would not

significantly affect the human environment. Regardless of the fuel economy of the exempted vehicles, they must pass the emissions standards which measure the amount of emissions per mile traveled. Thus, the quality of the air is not affected by the proposed exemption and alternative standard. Further, since the exempted passenger automobiles cannot achieve better fuel economy than is proposed herein, granting this proposed exemption would not affect the amount of fuel used.

Interested persons are invited to submit comments on the proposed decision. It is requested but not required that 10 copies be submitted.

Comments must not exceed 15 pages in length (49 CFR 553.21). Necessary attachments may be appended to these submissions without regard to the 15 page limit. This limitation is intended to encourage commenters to detail their primary arguments in a concise fashion.

If a commenter wishes to submit certain information under a claim of confidentiality, three copies of the complete submission, including purportedly confidential business information, should be submitted to the Chief Counsel, NHTSA, at the street address given above, and seven copies from which the purportedly confidential business information has been deleted, should be submitted to the Docket Section. A request for confidentiality should be accompanied by a cover letter setting forth the information specified in the agency's confidential business information regulation. 49 CFR part 512.

All comments received before the close of business on the comment closing indicated above for the proposal will be considered, and will be available for examination in the docket at the above address both before and after that date. To the extent possible, comments filed after the closing date will also be considered. Comments received too late for consideration in regard to the final rule will be considered as suggestions for further rulemaking action. Comments on the proposal will be available for inspection in the docket. NHTSA will continue to file relevant information as it becomes available in the docket after the closing date, and it is recommended that interested persons continue to examine the docket for new material.

Those persons desiring to be notified upon receipt of their comments in the rules docket should enclose a self-addressed, stamped postcard in the envelope with their comments. Upon receiving the comments, the docket supervisor will return the postcard by mail.

List of Subjects in 49 CFR Part 531

Energy conservation, Gasoline, Imports, Motor vehicles.

In consideration of the foregoing, 49 CFR part 531 would be amended as follows:

## PART 531—[AMENDED]

1. The authority citation for part 531 continues to read as follows:

Authority: 49 U.S.C. 32902, delegation of authority at 49 CFR 1.50.

2. In 49 CFR 531.5, the introductory text of paragraph (b) is republished and paragraph (b)(2) is revised to read as follows:

## § 531.5 Fuel economy standards.

\* \* \* \* \*

(b) The following manufacturers shall comply with the standards indicated below for the specified model years:

\* \* \* \* \* (2) Rolls-Royce Motors, Inc.

1990 .....

Model year	Average fuel econ- omy stand- ard (miles per gallon)
1978	10.7
1979	10.8
1980	11.1
1981	10.7
1982	10.6
1983	9.9
1984	10.0
1985	10.0
1986	11.0
1987	11.2
1988	11.2
1989	11 2

Model year	Average fuel econ- omy stand- ard (miles per gallon)
1991	12.7
1992	13.8
1993	13.8
1994	13.8
1995	14.6
1996	14.6
1997	15.1
1998	16.3
1999	16.3
* * * * *	
[Docket No. 96-085; N.1]	
Issued on: August 29, 1996.	

Patricia Breslin,

12.7

Acting Associate Administrator for Safety

Performance Standards.

[FR Doc. 96-22536 Filed 9-4-96; 8:45 am]

BILLING CODE 4910-59-P