DEPARTMENT OF TRANSPORTATION

National Highway Traffic Safety Administration

49 CFR Part 571

[Docket No. NHTSA-2011-0107]

RIN 2127-AL56

Federal Motor Vehicle Safety Standards; Electric-Powered Vehicles; Electrolyte Spillage and Electrical Shock Protection

AGENCY: National Highway Traffic Safety Administration (NHTSA), Department of Transportation (DOT).

ACTION: Final rule; response to petitions for reconsideration and technical corrections.

SUMMARY: This document denies a petition for reconsideration of Federal Motor Vehicle Safety Standard (FMVSS) No. 305, "Electric-powered vehicles; electrolyte spillage, and electrical shock protection" from Nissan Motor Company (Nissan) requesting the use of a megohmmeter as an alternative measurement method for the electrical isolation test procedure. Further, this document adopts various technical corrections and clarifications to the regulatory text of FMVSS No. 305 that do not change the substance of the rule.

DATES: The effective date of this final rule is [**INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER**]. Petitions for reconsideration of this final rule must be received not later than [**INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER**].

ADDRESSES: Petitions for reconsideration should refer to the docket number of this document and be submitted to the Administrator, National Highway Traffic Safety Administration,

1200 New Jersey Avenue, S.E., Washington, DC 20590.

FOR FURTHER INFORMATION CONTACT: For non-legal issues, contact Shashi Kuppa, Office of Crashworthiness Standards (telephone: 202-366–3827) (fax: 202-366–2990), NVS-113. For legal issues, contact Jesse Chang, Office of the Chief Counsel (telephone 202-366–9874) (fax: 202-366–3820), NCC-112. The mailing address for these officials is: National Highway Traffic Safety Administration, U.S. Department of Transportation, 1200 New Jersey Avenue, S.E., Washington, DC 20590.

SUPPLEMENTARY INFORMATION:

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I. Background

On June 14, 2010,[1] NHTSA issued a final rule amending the electrical shock protection requirements of Federal Motor Vehicle Safety Standard (FMVSS) No. 305, "Electric-powered vehicles; electrolyte spillage and electrical shock protection."[2] In that document, the agency changed the requirements in FMVSS No. 305 to add flexibility for manufacturers of electric vehicles (and other vehicles with high voltage components such as fuel cell vehicles) while still

[1] 75 FR 33515.
[2] 49 CFR 571.305.

maintaining protection for vehicle occupants and first responders from electrical shock. The main changes to the standard included creating two alternative compliance options (i.e., the electrical isolation[3] and low-voltage[4] options) and altering the requirements to recognize the difference between alternating current (AC) and direct current (DC) high voltage sources. In addition, the 2010 final rule included new definitions and made various updates to existing definitions to align the standard more closely with voluntary industry practice.

Subsequent to the 2010 final rule, the agency received various petitions for reconsideration from vehicle manufacturers and their trade associations. Many of the petitioners sought increased clarity of the definitions, test specifications, and performance requirements of the rule. The agency published a final rule responding to those petitions on July 29, 2011.[5] The main changes to the 2010 final rule were clarifications to the following:

(1) the scope, applicability, and the definitions in the standard,

(2) the retention requirements for electric energy storage/conversion systems,

(3) the electrical isolation requirements,

(4) test specifications and requirements for electrical isolation monitoring, and

(5) the state-of-charge of electric energy storage devices prior to crash tests.

In addition to the above clarifications to the requirements and test procedures of the standard, that response to petitions for reconsideration also denied requests that the agency

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[3] In essence, the electrical safety requirements for this compliance option were that (after testing in accordance with the standard's test procedures), electrical isolation for high voltage sources must be at 500 ohms/volt or greater unless the high voltage source is a DC source with electrical isolation monitoring. A DC source with electrical isolation monitoring must have electrical isolation that is greater than 100 ohms/volt. *See id.* at 33527.

[4] In the alternative, high voltage sources could meet the electrical safety requirements if their voltage was 30 volts for an AC source or lower (60 volts for a DC source).

[5] 76 FR 45436.

reconsider certain requests from the petitioners. Those requests included implementing a protective barrier compliance option for electrical safety, adjusting the test procedure to allow for alternative gas for crash testing hydrogen fuel cell vehicles, and adopting a low-energy compliance option for electrical safety. In response to those requests, the agency reiterated its positions on those matters from the 2010 final rule. We cited the lack of data to support the petitioners' requests to implement these changes to the standard. We also noted that no significant new research had produced any data that would have enabled the agency to arrive at a different conclusion from the 2010 final rule. In addition, we again expressed concerns in the 2010 final rule that some of these recommendations (such as using inert gas and megohmmeters for testing) might be outside the scope of the rulemaking.

II. Nissan's Petition for Reconsideration to the July 29, 2011 Final Rule

Subsequent to the 2011 final rule responding to petitions for reconsideration, the agency received a further petition for reconsideration. The petition (from Nissan) requested that we amend section S7.6 of FMVSS No. 305 to allow the use of a megohmmeter as an alternative measurement method for the electrical isolation test procedure.[6] Nissan suggested using a megohmmeter to measure the isolation resistance directly, rather than measuring voltage and calculating resistance (as presently specified in FMVSS No. 305). They contend that this results in a more stable and accurate post-crash test measurement procedure. Nissan noted that the test procedures for United Nations Economic Commission for Europe (ECE) Regulation No. 94

[6] A megohmmeter is a specialized ohmmeter that is primarily used to determine electrical isolation resistance. This device operates by applying a voltage or current to the item being tested. Because externally applied voltages or currents can disrupt its measurement (and/or cause damage to the instrument) the megohmmer is used to test items that are under an inactive and fully de-energized state.

allow such a measurement method.[7] In addition to enhanced measurement stability and accuracy, Nissan stated that a direct resistance measurement supports the use of an inert gas and inactive fuel cells in crash tests of fuel cell vehicles. Nissan expressed concern that the electrical isolation test procedure specified in FMVSS No. 305 S7.6 does not permit the use of inert gas and inactive fuel cells in crash tests because the procedure only specifies a voltage measurement method. Nissan asked the agency to expedite ongoing research to develop a test procedure for evaluating electrical safety of fuel cell vehicles with inert gas and inactive fuel cells.

III. Agency Response to Nissan's Petition for Reconsideration

As stated above, the agency has addressed the issue of including test procedures in FMVSS No. 305 for evaluating electrical isolation resistance that use a megohmmeter and an inert gas (first in the June 14, 2010 final rule and second in the July 29, 2011 final rule responding to petitions for reconsideration). In this final rule, our position on the matter has not substantively changed. We continue to be concerned that incorporating an alternative test procedure that incorporates a megohmmeter and inert gas would exceed the scope of this rulemaking.

The 2010 final rule did not provide alternative test procedures with these characteristics because the agency's research was ongoing, there was insufficient information to make any regulatory decisions on establishing these alternative test procedures, and the agency was concerned that this issue would be outside the scope of the rulemaking. In dealing with the same issue in the 2011 final rule, the agency stated that its position on the issue had not substantively

[7] ECE R.94, "Uniform Provisions Concerning the Approval of: Vehicles with Regard to the Protection of the Occupants in the Event of a Frontal Collision," Annex 11, "Test Procedures for the Protection of the Occupants of Vehicles Operating on Electrical Power from High Voltage and Electrolyte Spillage,"

changed since the 2010 final rule and that no new information was available to lead it to conclude otherwise. As with the 2010 final rule, we noted in the 2011 final rule that the agency was continuing its research to determine the feasibility for establishing alternative test procedures that would incorporate the use of a megohmmeter and inert gas.

Since publication of the 2011 final rule (and the petition for reconsideration of the 2011 final rule from Nissan), the agency has completed additional research on the feasibility of using a megohmmeter for measuring electrical isolation.[8] The research presents certain technical questions that need to be resolved (i.e., the research showed that megohmmeters could accurately measure electrical isolation resistance of DC high voltage sources in an inactive state but did not consistently do so for AC high voltage sources). We believe that the most appropriate forum to pursue these issues would be a subsequent rulemaking action that includes a new proposal. To incorporate a new set of procedures to test electrical isolation using the method suggested by Nissan in this document would likely raise concerns about the scope of the rulemaking and the effectiveness of the public's opportunity to comment on the merits of incorporating such procedures.

As discussed in the July 29, 2011 final rule, some international regulations and international standards permit the use of megohmmeters in crash tests of hydrogen powered vehicles. We believe that closer harmonization with international regulations (to the extent that

[8] Hydrogen Fuel Cell Vehicle Fuel System Integrity Research – Electrical Isolation Test Procedure Development and Verification, DOT HS 811 553, March 2012, http://www.nhtsa.gov/Research/Crashworthiness/Alternative%20Energy%20Vehicle%20Systems%20Safety%20Research.

they meet the need for safety and the other requirements of the Motor Vehicle Safety Act[9]) is an important consideration. However, as already noted in this document, this issue would be more appropriate for consideration in a subsequent rulemaking action. In that context, the agency would seek to propose a resolution for these technical issues that we have discovered through our research and obtain further input from the public on that approach. This process would help ensure that any such test procedure would be able to evaluate the vehicle's electrical safety using an inert gas and a megohmmeter in a clear, objective, and repeatable fashion.

Thus, the agency cannot grant (within this rulemaking) the petitioner's request to reconsider our decision not to incorporate a test procedure in FMVSS No. 305 for evaluating electrical isolation resistance using a megohmmeter and inert gas. However, as we noted in the July 29, 2011 final rule, manufacturers are not prohibited from using alternative test procedures and devices other than those in the FMVSSs as a basis for their compliance certification.

IV. Technical Corrections to the July 29, 2011 Final Rule

In addition to addressing the petition for reconsideration from Nissan, this document makes a few technical amendments to the regulatory text of FMVSS No. 305 to correct omissions, add clarity, and correct typographical errors. Due to the clerical nature of these corrections to the 2011 final rule, we find that there is good cause to determine that notice and comment on these corrections is unnecessary under the Administrative Procedure Act.[10]

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[9] The National Traffic and Motor Vehicle Safety Act ("Motor Vehicle Safety Act") directs this agency to establish Federal Motor Vehicle Safety Standards. It further states that these standards "shall be practicable, meet the need for motor vehicle safety, and be stated in objective terms." *See* 49 U.S.C. 30111(a).

[10] The Administrative Procedure Act states that general notice of proposed rulemaking is not required when an agency "for good cause finds . . . that notice and public procedure thereon are impracticable, unnecessary, or contrary to the public interest." *See* 5 U.S.C. 553(b)(3)(B).

a. Omitted Voltage Definitions

The three definitions for voltage of alternating current (VAC), voltage of direct current (VDC), and working voltage were included in paragraph S4 of the June 14, 2010 final rule but were inadvertently omitted in the July 29, 2011 final rule. This final rule restores these definitions in paragraph S4 of FMVSS No. 305 without any changes to the language from the 2010 final rule (except for a clarification to the definition of VAC, as will be discussed in the section that follows). We find that notice and comment is unnecessary for restoring these three definitions in paragraph S4 of FMVSS No. 305. It was clear that the omission of these definitions was a clerical mistake as the amended regulatory text from the 2011 final rule continued to use the terms VAC, VDC, and working voltage in the requirements and test procedures in the standard. Further, we did not mention removing the definitions from paragraph S4 in the preamble to the 2011 final rule and we believe that restoring these three definitions does not change the substantive requirements of FMVSS No. 305.

b. Clarification to Volts of Alternating Current (VAC) Definition

In addition to restoring the VAC definition into paragraph S4, we believe it is appropriate to further clarify the definition of VAC to be aligned with industry practices and other standardized definitions. Subsequent to the 2011 final rule, the agency received questions from the Alliance of Automobile Manufacturers ("the Alliance")[11] seeking confirmation that NHTSA intended to use the standard industry practice of using the root mean square value of voltage for VAC.

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[11] The Alliance of Automobile Manufacturers is an association of 12 vehicle manufacturers including BMW group, Chrysler Group LLC, Ford Motor Company, General Motors Company, Jaguar Land Rover, Mazda, Mercedes-Benz USA, Mitsubishi Motors, Porsche, Toyota, Volkswagen Group of America and Volvo Cars North America.

While we have expressed (throughout the rulemaking process) voltage of alternating current using the root meet square value, we agree with the Alliance that this definition could be clarified. In the 2010 final rule, the definition of VAC stated that "*VAC* means volts of alternating current (AC)." Due to the nature of alternating current, VAC varies in time and it could potentially be measured using a different method. However, our rulemaking process has always used the root mean square value for expressing VAC because the safety thresholds established by the 2010 final rule were based on limits of electrical current (that the body can withstand) from IEC Technical Specification 60479-1. This technical specification expresses electrical current for AC sources as the root mean square value of current.[12] As our safety thresholds for AC sources are based on electrical current limits expressed as the root mean square value of current, the voltage for AC sources must also be expressed using the root mean square value.[13]

We further expressed VAC as the root mean square value of voltage of AC sources because this is the standard definition used in common industry standards. The root mean square value is the square root of the time average value of the square of the voltage within a period of oscillation. Using this method of expressing AC voltage is common practice for a wide variety of industries. The Society of Automotive Engineers (SAE) Recommended Practice J1772,[14] refers to the voltage of AC mains as the root mean square value. The voltage of power typically

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[12] *See* IEC TS 60479-1, Fourth Edition, 2005-2007. Figure 20 shows the amount of current in AC (root mean square) over time and the associated probabilities of fibrillation. Section 5 explains these values and notes that alternating current values are expressed as root mean square values.

[13] Voltage is current multiplied by resistance (V = I x R). In order to establish the required electrical isolation in ohms per volt (e.g., 500 ohms/volt for AC sources in paragraph S5.3(a)) using the V = I x R equation, the voltage (for an AC source) must be expressed as the root mean square value of voltage given that the value of current that we are using is expressed as the root mean square value.

[14] SAE J1772 – Recommended practice for electric vehicle and plug-in hybrid electric vehicle conductive charge coupler.

supplied to homes (commonly referred to as "120 Volts") is the root mean square value of the AC supply. Voltage of electric power transmission lines are also reported as the root mean square value of voltage. Instrumentation devices, such as multimeters and voltmeters, also measure the root mean square value of voltage of alternating current sources.

Therefore, we find that notice and comment is unnecessary for this clarification to the definition of VAC. The agency is simply stating that VAC is expressed as the root mean square value of voltage in the VAC definition in FMVSS No. 305 to make clear a term that has always been expressed in this manner throughout the rulemaking process. We believe that this clarification does not substantively change the requirements of FMVSS No. 305. Further, the clarification does not change the industry understanding of VAC as used in the standard (as evidenced by the questions we received from industry on this matter).

c. Other Typographical Corrections to the Regulatory Text

In addition, the agency discovered various typographical errors resulting from the 2011 final rule that we are now correcting in this final rule. We find that notice and comment is unnecessary for these changes to FMVSS No. 305. These changes do not alter the substance of the rule. Instead, they correct various inconsistencies including incorrect paragraph references, incomplete sentences, and updating a reference to a current definition (as opposed to an old definition that has been removed from FMVSS No. 305).

In paragraph S5.4, this final rule corrects a reference dealing with electrical isolation monitoring requirements. Paragraph S5.4 establishes the requirements that an electrical isolation monitoring system must meet. Electrical isolation monitoring is required under paragraph S5.3(a)(3) when the electrical isolation of a DC high voltage source is greater or equal to 100

ohms/volt (as opposed to 500 ohms/volt without an electrical isolation monitoring system). S5.4 references S5.3 to indicate the situations under which electrical isolation monitoring is required. However, the current S5.4 incorrectly refers to S5.3(a)(2), a section applicable to DC high voltage sources *without* electrical isolation monitoring. Thus, the agency is correcting this reference to S5.3(a)(3) which is applicable to DC high voltage sources *with* electrical isolation monitoring. We believe that this change corrects a clear typographical error.

In addition, this final rule rewords S7.6.4 and S7.6.5 to clarify the language in these paragraphs. The 2011 final rule mistakenly edited paragraphs S7.6.4 and S7.6.5 to include incomplete sentences and the term "voltage(s)" when each paragraph only referenced one voltage measurement. In FMVSS No. 305, S7.6.4 states that the voltage(s) is/are measured as shown in Figure 2. It also has an incomplete sentence about the voltages(s) (V1) between the negative side of the high voltage source and the electrical chassis. Paragraph S7.6.5 states that the voltage(s) is/are measured as shown in Figure 3. It also has an incomplete sentence about the voltage(s) (V2) between the positive side of the high voltage source and the electrical chassis.

Since only a single voltage measurement is made in each of these sections, the references to "voltage(s)" are incorrect and confusing. Further, we have edited the paragraphs to remove the sentence fragments from each paragraph. Therefore, the agency is rewording S7.6.4 and S7.6.5 in this final rule. Paragraph S7.6.4 will state that the voltage V1 between the negative side of the high voltage source and the electrical chassis is measured as shown in Figure 2. Further, paragraph S7.6.5 will state that the voltage V2 between the positive side of the high voltage source and the electrical chassis is measured as shown in Figure 3.

As stated above, these changes correct grammatical errors for these two paragraphs without changing the substance of the requirements or the measurement procedures. These sentences merely restate the measurement procedure shown in Figure 2 and Figure 3 more clearly than the language adopted by the 2011 final rule.

Further, this final rule changes the phrase, "electrical isolation measurement," to "voltage measurement," in two instances of section S7.7 Voltage measurement. As evident from the other portions of the regulatory text, the measurements obtained in S7.7 are not "electrical isolation measurements" but are "voltage measurements." The title of S7.7 is "voltage measurement," suggesting that the measured value in S7.7 is the voltage. Paragraph S7.6 uses the voltage measurements to then calculate the electrical isolation resistance of a high voltage source. Further, "electrical isolation" is defined in the current standard as the resistance between any high voltage source and any of the vehicle's electrical chassis divided by the working voltage of the high voltage source. This measurement cannot be obtained through the procedure described in S7.7. Therefore, it is clear that the reference to "electrical isolation measurements" is a typographical error. Thus, this final rule changes the references to "electrical isolation measurements" to "voltage measurements" in order to clarify that the voltages are measured and the electrical isolation is computed from the voltage measurements. This is not a substantive change to the standard.

Finally, this final rule makes two minor clarifications to paragraph S8. First we are italicizing the title "Test procedure for on-board electrical isolation monitoring system" to clarify that it is a title. Second, we are revising the term "high voltage system to the propulsion motor(s)" in S8 subparagraph (2) to "electric energy storage/conversion system to the propulsion

system." This is also a typographical error because the terms "high voltage system" and "propulsion motor" are definitions that were replaced by "electric energy storage/conversion system" and "propulsion system" in the 2011 final rule. Thus, the terms "high voltage system" and "propulsion motor" are not defined in FMVSS No. 305 and it should be clear that the agency intended to use the updated definitions for paragraph S8 in the 2011 final rule. Thus, we are updating these terms in paragraph S8 and we do not believe that this is a substantive change to the standard.

V. Rulemaking Analyses and Notices

Executive Order 12866, Executive Order 13563, and DOT Regulatory Policies and Procedures

NHTSA has considered the impact of this rulemaking action under Executive Order 12866, Executive Order 13563, and the Department of Transportation's regulatory policies and procedures. This rulemaking document was not reviewed by the Office of Management and Budget under E.O. 12866, "Regulatory Planning and Review." It is not considered to be significant under E.O. 12866 or the Department's Regulatory Policies and Procedures (44 FR 11034; February 26, 1979). NHTSA has determined that the effects of this final rule are minor and that a regulatory evaluation is not needed to support the subject rulemaking. This final rule only makes slight changes to the regulatory text of the July 29, 2011 final rule to add clarification and does not impose significant costs beyond those already required by the July 29, 2011 final rule.

Regulatory Flexibility Act

Pursuant to the Regulatory Flexibility Act (5 U.S.C. 601 *et seq*., as amended by the Small Business Regulatory Enforcement Fairness Act (SBREFA) of 1996), whenever an agency is

required to publish a notice of proposed rulemaking or final rule, it must prepare and make available for public comment a regulatory flexibility analysis that describes the effect of the rule on small entities (i.e., small businesses, small organizations, and small governmental jurisdictions). No regulatory flexibility analysis is required if the head of an agency certifies the rule will not have a significant economic impact on a substantial number of small entities. SBREFA amended the Regulatory Flexibility Act to require Federal agencies to provide a statement of the factual basis for certifying that a rule will not have a significant economic impact on a substantial number of small entities.

NHTSA has considered the effects of this final rule under the Regulatory Flexibility Act. I certify that this final rule does not have a significant economic impact on a substantial number of small entities. Any small manufacturers that might be affected by this final rule are already subject to the requirements of FMVSS No. 305.

Executive Order 13132 (Federalism)

NHTSA has examined this final rule pursuant to Executive Order 13132 (64 FR 43255; Aug. 10, 1999) and concluded that no additional consultation with States, local governments, or their representatives is mandated beyond the rulemaking process. The agency has concluded that the final rule does not have sufficient federalism implications to warrant consultation with State and local officials or the preparation of a federalism summary impact statement. The final rule does not have "substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government." This final rule does not impose substantial additional requirements. Instead, it clarifies the existing requirements from the July 29, 2011 final rule.

NHTSA rules can have preemptive effect in two ways. First, the National Traffic and Motor Vehicle Safety Act contains an expressed preemption provision that states when a motor vehicle safety standard is in effect under this chapter, a State or a political subdivision of a State may prescribe or continue in effect a standard applicable to the same aspect of performance of a motor vehicle or motor vehicle equipment only if the standard is identical to the standard prescribed under this chapter. 49 U.S.C. 30103(b)(1). It is this statutory command that preempts any non-identical State legislative and administrative law[15] addressing the same aspect of performance, not this rulemaking.

The express preemption provision described above is subject to a savings clause under which "[c]ompliance with a motor vehicle safety standard prescribed under this chapter does not exempt a person from liability at common law." 49 U.S.C. 30103(e). Pursuant to this provision, State common law tort causes of action against motor vehicle manufacturers that might otherwise be preempted by the express preemption provision are generally preserved. However, the Supreme Court has recognized the possibility, in some instances, of implied preemption of State common law tort causes of action by virtue of NHTSA's rules—even if not expressly preempted.

This second way that NHTSA rules can preempt is dependent upon the existence of an actual conflict between an FMVSS and the higher standard that would effectively be imposed on motor vehicle manufacturers if someone obtained a State common law tort judgment against the manufacturer—notwithstanding the manufacturer's compliance with the NHTSA standard.

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[15] The issue of potential preemption of state tort law is addressed in the immediately following paragraph discussing implied preemption.

Because most NHTSA standards established by an FMVSS are minimum standards, a State common law tort cause of action that seeks to impose a higher standard on motor vehicle manufacturers will generally not be preempted. However, if and when such a conflict does exist—for example, when the standard at issue is both a minimum and a maximum standard—the State common law tort cause of action is impliedly preempted. See *Geier v. American Honda Motor Co*., 529 U.S. 861 (2000).

Pursuant to Executive Order 13132, NHTSA has considered whether this rule could or should preempt State common law causes of action. The agency's ability to announce its conclusion regarding the preemptive effect of one of its rules reduces the likelihood that preemption will be an issue in any subsequent tort litigation.

To this end, the agency has examined the nature (e.g., the language and structure of the regulatory text) and objectives of this rule and finds that this rule merely clarifies the requirements and definitions contained in the July 29, 2011 final rule. Thus, NHTSA does not intend that this rule preempt state tort law that would effectively impose a higher standard on motor vehicle manufacturers than that established by this rule. Additionally, in the July 29, 2011 final rule, the agency did not assert preemption. Establishment of a higher standard by means of State tort law would not conflict with the final rule announced here. Without any conflict, there could not be any implied preemption of a State common law tort cause of action.

National Environmental Policy Act

NHTSA has analyzed this rulemaking action for the purposes of the National Environmental Policy Act. The agency has determined that implementation of this action will not have any significant impact on the quality of the human environment.

Executive Order 12988 (Civil Justice Reform)

When promulgating a regulation, agencies are required under Executive Order 12988 to make every reasonable effort to ensure that the regulation, as appropriate: (1) Specifies in clear language the preemptive effect; (2) specifies in clear language the effect on existing Federal law or regulation, including all provisions repealed, circumscribed, displaced, impaired, or modified; (3) provides a clear legal standard for affected conduct rather than a general standard, while promoting simplification and burden reduction; (4) specifies in clear language the retroactive effect; (5) specifies whether administrative proceedings are to be required before parties may file suit in court; (6) explicitly or implicitly defines key terms; and (7) addresses other important issues affecting clarity and general draftsmanship of regulations.

Pursuant to this Order, NHTSA notes as follows. The preemptive effect of this final rule is discussed above. NHTSA notes further that there is no requirement that individuals submit a petition for reconsideration or pursue other administrative proceeding before they may file suit in court.

Privacy Act

Please note that anyone is able to search the electronic form of all comments received into any of our dockets by the name of the individual submitting the comment (or signing the comment, if submitted on behalf of an association, business, labor union, etc.). You may review DOT's complete Privacy Act Statement in the **Federal Register** published on April 11, 2000 (65 FR 19477–78), or online at http://www.dot.gov/privacy.html.

Paperwork Reduction Act

Under the Paperwork Reduction Act of 1995 (PRA), a person is not required to respond to a collection of information by a Federal agency unless the collection displays a valid OMB control number. There are no information collection requirements associated with this final rule.

National Technology Transfer and Advancement Act

Under the National Technology Transfer and Advancement Act of 1995 (NTTAA) (Pub. L. 104–113), "all Federal agencies and departments shall use technical standards that are developed or adopted by voluntary consensus standards bodies, using such technical standards as a means to carry out policy objectives or activities determined by the agencies and departments." Voluntary consensus standards are technical standards (e.g., materials specifications, test methods, sampling procedures, and business practices) that are developed or adopted by voluntary consensus standards bodies, such as the Society of Automotive Engineers (SAE). The NTTAA directs us to provide Congress, through OMB, explanations when we decide not to use available and applicable voluntary consensus standards. FMVSS No. 305 has historically drawn largely from SAE J1766. Prior to this update, FMVSS No. 305 was based on the April 2005 version of SAE J1766. However, this final rule has made certain amendments to the standard to reflect the development of new voluntary consensus standards that have superseded SAE J1766. Thus, this final rule makes revisions to the June 14, 2010 final rule that updated FMVSS No. 305.

Unfunded Mandates Reform Act

The Unfunded Mandates Reform Act of 1995 requires agencies to prepare a written assessment of the costs, benefits and other effects of proposed or final rules that include a Federal mandate likely to result in the expenditure by State, local or Tribal governments, in the

aggregate, or by the private sector, of more than $100 million annually (adjusted for inflation with base year of 1995). This final rule, which clarifies the July 29, 2011 final rule, will not result in expenditures by State, local or Tribal governments, in the aggregate, or by the private sector in excess of $100 million annually.

Regulation Identifier Number (RIN)

The Department of Transportation assigns a regulation identifier number (RIN) to each regulatory action listed in the Unified Agenda of Federal Regulations. The Regulatory Information Service Center publishes the Unified Agenda in April and October of each year. You may use the RIN contained in the heading at the beginning of this document to find this action in the Unified Agenda.

List of Subjects in 49 CFR Part 571

Imports, Motor vehicles, Motor vehicle safety.

In consideration of the foregoing, NHTSA amends 49 CFR part 571 as follows:

PART 571—FEDERAL MOTOR VEHICLE SAFETY STANDARDS

1. The authority citation for part 571 continues to read as follows:

Authority: 49 U.S.C. 322, 30111, 30115, 30117, and 30166; delegation of authority at 49 CFR 1.95.

2. Amend §571.305 by:

a. Adding, in alphabetical order, the definitions of "VAC," "VDC," and "Working Voltage" to S4;

b. Revising S5.4, S7.6.4, S7.6.5, S7.7, the heading of S8, and S8(2).

The additions and revisions read as follows:

§571.305 Standard No. 305; Electric-powered vehicles: electrolyte spillage and electrical shock protection.

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S4. *Definitions*.

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VAC means volts of alternating current (AC) expressed using the root mean square value.

VDC means volts of direct current (DC).

Working Voltage means the highest root mean square voltage of the voltage source, which may occur across its terminals or between its terminals and any conductive parts in open circuit conditions or under normal operating conditions.

* * * * *

S5.4 *Electrical isolation monitoring*. Each DC high voltage source with electrical isolation monitoring during vehicle operation pursuant to S5.3(a)(3) shall be monitored by an electrical isolation monitoring system that displays a warning for loss of isolation when tested according to S8. The system must monitor its own readiness and the warning display must be visible to the driver seated in the driver's designated seating position.

* * * * *

S7.6.4 The voltage V1 between the negative side of the high voltage source and the electrical chassis is measured as shown in Figure 2.

S7.6.5 The voltage V2 between the positive side of the high voltage source and the electrical chassis is measured as shown in Figure 3.

* * * * *

S7.7 *Voltage measurement*. For the purpose of determining the voltage level of the high voltage source specified in S5.3(b), voltage is measured as shown in Figure 1. Voltage Vb is measured across the two terminals of the voltage source. Voltages V1 and V2 are measured between the source and the electrical chassis. For a high voltage source that has an automatic disconnect that is physically contained within itself, the voltage measurement after the test is made from the side of the automatic disconnect connected to the electric power train or to the rest of the electric power train if the high voltage source is a component contained in the power train. For a high voltage source that has an automatic disconnect that is not physically contained within itself, the voltage measurement after the test is made from both the high voltage source side of the automatic disconnect and from the side of the automatic disconnect connected to the electric power train or to the rest of the electric power train if the high voltage source is a component contained in the power train.

S8. *Test procedure for on-board electrical isolation monitoring system*. * * *

(2) The switch or device that provides power from the electric energy storage/conversion system to the propulsion system is in the activated position or the ready-to-drive position.

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Issued in Washington, DC on January 2, 2015, under authority delegated in 49 CFR part 1.95

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David J. Friedman,
Deputy Administrator.

Billing Code 4910-59

[FR Doc. 2015-00423 Filed 01/15/2015 at 8:45 am; Publication Date: 01/16/2015]