

**Subpart B—Bus Testing Procedures****§ 665.11 Testing requirements.**

(a) A new bus model to be tested at the bus testing facility shall—

(1) Be a single model;

(2) Meet all applicable Federal Motor Vehicle Safety Standards, as defined by the National Highway Traffic Safety Administration in part 571 of this title;

(3) Be substantially fabricated and assembled by techniques and tooling that will be used in production of subsequent buses of that model.

(b) If the new bus model had not been previously tested at the bus testing facility, then the new bus model shall undergo the full tests requirements for maintainability, reliability, safety, performance, structural integrity, fuel economy, and noise;

(c) If the new bus model had not been previously tested at the bus testing facility and is being produced on a mass produced chassis that has been previously tested on another bus model at the bus testing facility, then the new bus model may undergo partial testing requirements;

(d) If the new bus model had been previously tested at the bus testing facility, then the new bus model may undergo partial testing requirements.

(e) The following vehicle types shall be tested:

(1) Minimum service life of 12 years or 500,000 miles—typified by heavy duty large buses, approximately 35–40 foot, as well as articulated buses.

(2) Minimum service life of ten years or 350,000 miles—typified by heavy duty small buses, approximately 30 foot.

(3) Minimum service life of seven years or 200,000 miles—typified by medium duty mid-size buses, approximately 25–35 foot.

(4) Minimum service life of five years or 150,000 miles—typified by light duty mid-size buses, approximately 25–35 foot.

(5) Minimum service life of four years or 100,000 miles—typified by light duty small buses, cutaways, and modified vans, approximately 16–28 foot.

(f) Tests performed in a higher service life category (*i.e.*, longer service life) need not be repeated when the same bus model is used in lesser service life applications. However, the use of a

bus model in a service life application higher than it has been tested for may make the bus subject to the bus testing requirements.

(g) The operator of the facility shall develop a test plan for the testing of vehicles at the facility, which generally follows the guidelines set forth in appendix A of this part.

**§ 665.13 Test report and manufacturer certification.**

(a) Upon completion of testing, the operator of the facility shall provide a test report to the entity that submitted the bus for testing.

(b)(1) A manufacturer of a new bus model or a bus produced with a major change in component or configuration shall provide a copy of the test report to a recipient during the point in the procurement process specified by the recipient.

(2) A manufacturer who releases a report under paragraph (b)(1) of this section also shall provide notice to the operator of the facility that the report is available to the public.

(c) If a bus model subject to a test report has a change that is not a major change under this part, the manufacturer shall advise the recipient during the procurement process and shall include description of the change and its basis for concluding that it is not a major change.

(d) A test report shall be available publicly once the owner of the report makes it available during the recipient's procurement process. The operator of the facility will have available for distribution copies of all the publicly available reports.

(e) The test report is the only information or documentation that will be made available publicly in connection with any bus model tested at the facility.

**Subpart C—Operations****§ 665.21 Scheduling.**

(a) A manufacturer may schedule a vehicle for testing by contacting Penn State's Transportation Institute (PSTI) at the following address: The

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Pennsylvania State University, Pennsylvania Transportation Institute, Research Building B, University Park, PA 16802, (814) 863-1889.

(b) Upon contacting PSTI, the manufacturer will be provided the following:

- (1) A draft contract for the testing;
- (2) A fee schedule; and
- (3) The draft test procedures that will be conducted on the vehicle.

(c) PSTI will provide final test procedures to be conducted on the vehicle at the time of contract execution.

(d) PSTI will process vehicles for testing in the order in which the contracts are signed.

## § 665.23 Fees.

(a) Fees charged by the operator are according to a schedule approved by the FTA, which include different fees for partial testing.

(b) Fees will be prorated for a vehicle withdrawn from the facility before the completion of testing.

## § 665.25 Transportation of vehicle.

A manufacturer is responsible for transporting its vehicle to and from the facility at the beginning and completion of the testing.

## § 665.27 Procedures during testing.

(a) The facility operator shall perform all testing, consistent with established procedures at the facility and with the test procedures provided to the manufacturer at the time of contract execution.

(b) The manufacturer of a bus being tested may terminate the test program at any time before the completion of testing, and shall be charged a fee for the tests performed.

(c) The operator shall perform all maintenance and repairs on the test vehicle, consistent with manufacturers specifications, unless the operator determines that the nature of the maintenance or repair is best performed by the manufacturer under the operator's supervision.

(d) The manufacturer may observe all tests. The manufacturer may not provide maintenance or service unless requested to do so by the operator.

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### APPENDIX A TO PART 665—TESTS TO BE PERFORMED AT THE BUS TESTING FACILITY

The seven tests to be performed on each vehicle are required by STURAA and are based in part on tests described in the FTA report "First Article Transit Bus Test Plan", which is mentioned in the legislative history of section 317. When appropriate, SAE test procedures and other procedures accepted by the transit industry will be used. The seven tests are described in general terms in the following paragraphs.

#### 1. Maintainability

The maintainability test includes bus servicing, preventive maintenance, inspection, and repair. It also will include the removal and reinstallation of the engine and drive train components that would be expected to require replacement during the bus' normal life cycle. Much of the maintainability data will be obtained during the bus durability test at the proving ground. Up to twenty-five percent of the bus life will be simulated and there will be servicing, preventive maintenance, and repair actions. These actions will be done by test facility staff, although manufacturers will be allowed to maintain a representative on site during the testing. Test facility staff may require a manufacturer to provide vehicle servicing or repair, under the supervision of the facility staff. Since the operator will not become familiar with the detailed design of all new bus models that are tested, tests to determine the time and skill required to remove and reinstall an engine, a transmission, or other major propulsion system components may require advice from the bus manufacturer. All routine and corrective maintenance will be carried out by the test operator in accordance with the manufacturer's specifications.

The maintainability test report will include the frequency, personnel hours, and replacement parts or supplies required for each action during the test. The accessibility of selected components and other observations that could be important to a bus user will be included in the report.

#### 2. Reliability

The question of reliability will be addressed by recording all bus breakdowns during testing. It is recognized that with one test bus it is not feasible to conduct statistical reliability tests. It is anticipated that bus operation on the durability course should reveal the problems that would otherwise not be detected until much later during scheduled transit service. The bus failures, repair time, and the actions required to get the bus back into operation will be recorded in the report.