

BNSF Railway - Certification Program

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ALL REGULATION REFERENCES WITHIN THE PROGRAM ARE 49 CFR PART 240. UNLESS NOTED.

Section 1: General Information and Elections.

Name of the railroad:

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A. Election to Train 240.103(b)(1):

BNSF accepts the responsibility to educate previously untrained persons to be qualified engineers and/or remote control operators (RCO). The training program is described in section five of this program.

B. Classes of Service 240.107(b)

Locomotive engineers or remote control operators must be certified in the appropriate class of service in order to operate remote equipment or a locomotive. Engineers or remote control operators must have appropriate certificate in their possession while operating and must display that certificate when requested by a company officer or FRA representative. BNSF will issue certificates for the following classes of service:

1. **Train Service Engineer.** Certified train service engineers are permitted to operate locomotives with or without cars in yard or road service.
2. **Student Engineer** - Certified student engineers may operate locomotives under the close supervision of a certified train service engineer or certified locomotive servicing engineer and will be governed by the limitations of the specific class of service.
3. **Remote Control Operator** - (RCO) Certified remote control operators may work with equipment by means of portable controller. In the initial implementation this equipment will be used in selected locations where the job will be involved in gathering and distribution of freight and/or equipment that is typically required of yard, road switcher, or other similar assignments at the implementing location(s). The specific assignments involved will vary by locations and could include such work as; hump, trimmer, classification operations, transfer, road switcher, industrial and station switching. A detailed explanation of the BNSF Remote Control Operator Training Program is included in Appendix B of this program.

4. **Student Remote Control Operator** - Certified student remote control operators may work with equipment by means of a portable controller under the close supervision of a certified remote control operator.
5. **Locomotive Servicing Engineer (Hostler)** - Certified locomotive servicing engineers may operate locomotives within a yard or terminal area for hostling purposes. They may not move cars coupled to the locomotive.

Section 2: Selection of Supervisors of Certified Employees.

Contact Person: Kathy Conkling

A. Designating Supervisors 240.105

The following procedure will be used for designating supervisors of locomotive engineers or remote control operators:

Only experienced locomotive engineers and remote control operators will be considered for qualification as "Designated Supervisors of Locomotive Engineers" (DSLE) and/or "Designated Supervisors of Remote Control " (DSRC). Candidates will receive instruction on the requirements of Part 240 and the BNSF Engineer and Remote Control Operator Certification Program. The instruction must be administered by a current DSLE or DSRC who will provide the candidate with a current copy of 49 CFR Part 240 and the BNSF current submission.

The DSLE will be considered qualified on the physical characteristics once the minimum number of trips, on the assigned territory, have been completed, as determined by Superintendent of Operating Practices (SOP). The SOP will establish the minimum number of trips based on the following criteria:

- 1: Experience level of DSLE
- 2: Type of territory/grade conditions to be supervised
- 3: Type of territory with previous experience as an engineer
- 4: Experience level with equipment used on territory to be supervised

If the DSLE has not performed duty on the particular territory within a one (1) year period, the DSLE must re-qualify on the territory. The re-qualification process will require a minimum of one trip over the territory. In certain situations, BNSF elects to use hi-rail equipment, lite engines, video, or simulators with the actual or simulated territory to observe and experience the territory. This type of familiarization is designed to accelerate the DSLE's ability to obtain the operating skills and physical characteristic knowledge of a section of track. These methods of territory familiarization may be used exclusively for re-qualification. However, for familiarization and qualification on territory on which not previously qualified, this training may be supplemented with actual train rides.

The Superintendent of Operating Practices (SOP) and/or Senior Manager Engineer Training/Certification will determine if the candidate meets the requirements of 240.105(b). In making the determination, consideration will be given to the candidates train handling knowledge, skill level, territory qualification and supervisory experience. The candidate must also be administered the current DSLE/DSRC examination, passing scoring is 90% or higher. The answer sheet will be sent to Engineer Certification for file retention. If the above requirements have been satisfied, the candidate will be designated as a supervisor of locomotive engineers or remote control operators. Notification will be sent to the Manager of Engineer Certification and the name of the newly designated supervisor will be added to the written document required by 240.221(a).

Section 3: Training Persons Previously Certified.

Contact Person: Kathy Conkling

A. Continuing Education 240.123(b).

Mandatory training programs will be used to ensure that each certified employee maintains proficiency. Program content will be revised at least once prior to beginning a new re-certification cycle to ensure that certified employees receive a progressive continuing education program.

1. **Train Service Engineers** are required to complete a re-certification program at the beginning of each 36-month cycle. This re-certification program may be conducted at the employees' work location or at the Technical Training Center in Overland Park, Kansas.

BNSF will utilize two separate types of recertification programs to satisfy this requirement - the LER (Locomotive Engineer Certification) or the NLER (NetSim Locomotive Engineer Recertification) programs.

The LER program will consist of the following:

Subjects to be covered in the program and approximate duration are as follows:
(Approximately)

- | | |
|---------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2 hour | Instruction on Air Brake and Training Handling Rules including the procedures for performing air brake tests and mechanical inspections. Site specific operating conditions and physical characteristics are also covered. Also included in this session is training for new technology. |
| 1 hour | Hazardous material instruction which includes documentation, inspection, car type, group placement and train make-up restrictions. |
| 2 hours | Instruction on the General Code of Operating Rules covers the railroad operating rules and practices including signal aspects and indications. A portion of this time will be devoted to specific safety rules for TYE employees concerning personal safety. This section will also review "current event" federal safety rules such as: two-way end-of-train device operation, event recorder requirement, remote control operations, etc. |
| 3 hours | Knowledge examination. |
| 8 hours | Total program time |

The NLER program will consist of the following:

Subjects to be covered in the NLER program and approximate duration are as follows:
(Approximately)

- | | |
|---------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 3 hours | Instruction on Air Brake and Training Handling Rules including the procedures for performing air brake tests and mechanical inspections. Hazardous material instruction, which includes documentation, inspection, car type, group placement and train make-up restrictions. A portion of this time will be devoted to specific safety rules for TYE employees concerning personal safety. Site specific operating conditions and physical characteristics are also covered. |
| 2 hours | Knowledge examination. |
| 3 hours | Computer-Scored Simulator Evaluations. To enhance our ability in ensuring that an engineer can demonstrate the understanding and actual application of various General Code of Operating Rules that were traditionally tested in a written format, these rules will now be tested in actual simulated runs. |
| 8 hours | Total program time |

A list of "Rules to Study" will be provided sufficiently in advance of the required program.

In addition to the recertification program, BNSF certified employees will attend various training modules on "current event" subjects. These courses may be given during safety marathons or by utilizing "on time delivery" of CBT (Computer Based Training) prior to on-duty times. The short segment classes or CBT modules will be designed for high impact results. Examples of the modules are Crew Fatigue Countermeasures, Crew Resource Management, Positive Train Control Systems, Train Make-up, Train Handling, Safety Rules and General Responsibilities, etc.

BNSF is an industry leader in the development and implementation of Computer Based Training (CBT) and Networked Locomotive Simulators (NetSim). BNSF has placed approximately 700 CBT machines across the system and has 36 transportable networked simulators. Certified employees will be afforded the opportunity to conduct self-guided training classes on training modules. These modules may include, but are not limited, to Hazardous Materials, General Code of Operating Rules (GCOR), Locomotive Air Brakes, Freight Car Air Brakes, Distributive Power, etc. BNSF reserves the right to use CBT, NetSims or any other new technology available for the delivery of its educational/testing programs and equipment qualifications.

2. Remote Control Operators – Previously Certified Train Service Engineers will receive as a minimum the following training on the technology and operation of remote control equipment at the employees work location. The program will allow for hands on operation on a production assignment that operates using remote control equipment under supervision of a qualified employee whom has been appropriately trained and qualified by the railroad. The BNSF reserves the right to require more than the minimum requirements.

- 1.5 days Classroom Instruction
- 2.5 days Field Training
- 1.0 day Final Operating/written examination

2a. Remote Control Operators are required to attend a training program at the beginning of each 36-month cycle. This re-certification program will be conducted at the employees' work location. The program modules for this class of service are approximately as follows:

- 3 hours Safety rules and general rules applicable to this operation. Specific topics include coupling/uncoupling, blue flag, radio rules, operating switches, getting on/off equipment, and drug/alcohol rules.
- 1 hour Instruction on the proper operation of remote control equipment including safety devices.
- 2 hours Knowledge examination
- 1 hour A skill performance test will be conducted by a Designated Supervisor of Locomotive Engineers or Designated Supervisor of Remote Control Operations while the operator is at the controls of the remote equipment.
- 6 hours Total program time

A detailed explanation of the BNSF Remote Control Operator Training Program Is included in Appendix "B" of this program.

3. **Locomotive Servicing Engineers (Hostler)** are required to attend a half-day training program at the beginning of each 36-month cycle. The re-certification training is conducted at the employees work location. The program modules for this class of service are approximately as follows:

3 hours Instruction on the Safety Rules, General Code of Operating Rules, and Air Brake and Train Handling Rules. This instruction includes main track authority, signal system rules, air brake tests, mechanical condition of equipment and movement of locomotives within mechanical department limits.

2 hours Knowledge Examination.

30 minutes A skill performance test will be conducted by a DSLE while the operator is at the controls of a locomotive.

5.5 hours Total program time

4. Dual certified operators (includes Train Service Engineers/ Remote Control Operators and Remote Control Operators/ Locomotive Servicing Engineers) will complete re-certification training in their current class of service.

B. Territory Qualification

Territory qualification is required to perform service as a train service engineer without the assistance of a qualified pilot. Train service engineers assigned to new routes or who become unqualified on current assigned routes due to lack of route familiarization will be required to contact their Road Foreman of Engines (RFE), or other supervisor. The number of trips needed for territory qualification will be determined by the local RFE for that territory. The engineer will be considered qualified on the physical characteristics once the minimum number of trips on assigned territory has been completed, as determined by RFE. The RFE will establish the minimum number of trips based on the following criteria:

1. Experience level of the engineer
2. Type of territory/grade conditions to be operated on
3. Type of territory with previous experience as an engineer or trainman
4. Previous training
5. Experience level with equipment used on territory to be supervised

Certified engineers/pilots will remain territory qualified if they have traversed the territory in the previous 12 months (6 months on certain mountain territories) as: A train service engineer; a student engineer, under the direct supervision of a qualified engineer, who has met the minimum number of trips as outlined by the Designated Supervisor of Locomotive Engineers; or a trainman on board the controlling locomotive.

In certain situations, BNSF elects to use hi-rail equipment, lite engines, video, or simulators with the actual or simulated territory to observe and experience the territory. This type of familiarization is designed to accelerate the engineer's/pilot's ability to obtain

the operating skills and physical characteristics knowledge of a section of track. For other than re-qualification, this training will be supplemented with actual train operation. For initial training, prior to the engineer's first solo operation of a train over the territory, the engineer will be evaluated and qualified by a DSLE.

In determining qualification for pilots, the supervisor will take into consideration the experience level of the employee on that territory. If the pilot is deemed not qualified, the supervisor will use the same criteria as established in paragraph one, items 1-5, listed above for qualification requirements.

Territory qualification and the use of pilots are not required if the movement is on a section of track with an average grade of less than 1% over 3 continuous miles, and

1. The track is other than a main track; or
2. The maximum distance the locomotive or train will be operated does not exceed one mile; or
3. The maximum authorized speed for any operation does not exceed 20 miles per hour; or
4. Operations are conducted under operating rules that require every locomotive and train to proceed at a speed that permits stopping within one half the range of vision.

A person acting as a pilot may not be an assigned member of the crew. In addition,

1. When a pilot is required account an engineer has no previous experience on the route, the pilot must be a certified train service engineer qualified on the route.
2. When a pilot is required account an engineer requires re-familiarization on a route where previously qualified; any person with route familiarization may be used as a pilot.

During the normal bidding and bumping process, remote control operators may be required to move from one type of yard operation to another. They might also be required to move from one terminal to another in which a different manufacturer of remote control equipment is in use. In either event, adequate familiarization trips and/or additional training in the use of the equipment they will be using will be provided.

C. Addressing Changes

When the need arises for training in the area of new technology or new operating rules, the training will occur in the form of safety and quality improvement classes. These type classes are conducted at various locations and times across the system until the message has reached the affected certified employees. This training can be either voluntary or mandatory depending upon the safety sensitivity of the subject matter and may be delivered in any form of training medium.

General Notices and General Orders are used to communicate rule changes, changes in physical plant affecting train operation, and other matters such as new or changed operating practices or safety policies.

Section 4: Testing and Evaluating Persons Previously Certified.

Contact Person: Kathy Conkling

A. Knowledge Examination 240.125

Multiple choice examinations are used to ensure that certified employees are knowledgeable in the areas of personal safety, operating rules and practices, mechanical condition of equipment, power brake regulations, train handling methods as they relate to physical characteristics of the railroad, and federal safety rules. These examinations maybe categorized for scoring and are administered "closed book", except for the purpose of testing an engineer's ability to use such reference books or materials. These examinations are conducted in conjunction with the conclusion of the triennial re-certification training described in section three.

Questions for the examinations are drawn from the Safety Rules, General Code of Operating Rules, Air Brake and Train Handling Rules, Timetable and Special Instructions.

The requirement for Train Service Engineers will be conducted in one of the following manners:

- Locomotive Engineer Recertification Exam (LER) – The composite examination will have a minimum of 100 questions requiring a minimum score of 90% for passing (89.5% will round up to 90%).
- NetSim Locomotive Engineer Recertification Exam (NLER) – The composite examination will have at least 30 questions requiring a minimum of 90% for passing (89.5% will round up to 90%). It will be based on questions that will ensure rules knowledge in the areas of Air Brake and Train Handling, Hazardous Materials, Locomotive Daily Inspection, Territory Specific Scenarios and TY&E Safety practices. This exam will only be used at a NetSim location and will be in conjunction with a computer generated scored evaluation run on the simulator.

The requirement for Remote Operators and Locomotive Servicing Engineers are as follows:

- Remote Control Operator composite examination will have at least 50 questions requiring a minimum score of 90% for passing (89.5% will round up to 90%).
- Locomotive Servicing Engineer composite examination will have at least 50 questions requiring a minimum score of 90% for passing (89.5% will round up to 90%).

Certified employees who fail a written or CBT knowledge test will not be allowed to operate a locomotive or work in remote control operation (except under the provisions of a student engineer or student remote control operator) until they achieve a passing score during a reexamination. Additional opportunities to take the test will be afforded as follows:

2nd ATTEMPT

- ◆ Must occur not later than 30 days of the first attempt or another failure will be recorded. Certified employees scoring less than 90% must take action to increase his/her proficiency levels in the areas noted as deficient by the previous exam. A retake of only questions missed will be required.

3rd ATTEMPT

- ◆ Certified employees failing to achieve a passing score on the first two attempts must again take action to increase his/her proficiency levels in the areas noted as deficient by previous exams. They must retake the entire examination within 30 days of the second attempt, but not sooner than 12 hours. The minimum passing score is 90%.

SUBSEQUENT RETAKES

- ◆ Additional opportunities for reexamination will be offered to certified employees only after a period of at least 7 days from the date of the last test. Prior to reexamination, the employee must take action to increase his/her proficiency levels in the areas noted as deficient by previous exams. The Road Foreman of Engines or Manager TYE Field Training will aid the employee in securing resources to rectify any shortcomings. In all cases, the engineer must successfully pass the examination within 12 months from the initial attempt.

DENIAL OF CERTIFICATION BASED ON WRITTEN EXAMINATION

- ◆ Certified employees not capable of passing the examination will be denied certification.

B. Skills Performance Examination 240.127

The skills performance evaluation will be accomplished with train rides or by using Type II simulators that monitor compliance with:

- General Code of Operating Rules
- BNSF Railway Air Brake and Train Handling Rules
- Written and mandatory directives including timetable, general order, track warrants and general track bulletins

Additional items that may be evaluated during the skills evaluation on train or created in the simulator environment include, but are not limited to:

- Diverging route movements
- Unanticipated stop conditions
- Movement at restricted speed
- Equipment failure
- Equipment inspection practices
- Operating practices, including securing equipment, recharging air brake system, and air brake tests

1. **Train Ride:** The performance skills of certified employees may be examined while they are at the controls of the type of train or equipment (remote control) they would be permitted or required to operate. A designated supervisor of certified employees of the appropriate class of service must conduct the examination. The supervisor will evaluate the certified employee while they are performing the most demanding type of operations for the class of service being examined. The minimum duration of the on board skills performance examination for train service engineers is two hours or 50 miles. A minimum of one hour is required to conduct this test for remote control operators and 30 minutes for locomotive servicing engineers. Employees who maintain certification in two classes of service will satisfy this requirement by being examined in either one of their dual certified classes. A train ride in both classes will not be required.

2. **Simulator:** The performance skills of certified engineers may be examined on a Type II simulator prior to the recertification decision. The examination run is approximately one hour and 15 minutes in length. Computer aided scoring may be used to assist in this evaluation. The minimum passing score is 90%. A designated supervisor of locomotive engineers will supervise the simulator skills evaluation program and the simulated trip will be of sufficient length to make a thorough evaluation.

Prior to making a run, each engineer will participate in an orientation session relating to locomotive simulator operations and the associated graphical displays. Additionally, each engineer will receive the following information relating to the run: track profile, train consist information, tonnage distribution profile, timetable/special instructions, track warrants and general track bulletins as required.

Failure of a skills performance examination will occur when an engineer fails to demonstrate minimum skill requirements as determined by the DSLE or whenever an engineer fails to comply with any item under Part 240.117 (e)1-5.

Engineers who fail the examination will not be allowed to operate a locomotive, in other than student status, until they achieve a passing score during a reexamination. The reexamination will occur within 30 days and may be conducted on a Type II simulator or during the operation of an actual train ride while being observed by a DSLE.

EXCEPTION: If the engineer is participating in the One-Day-Tri-Net program (NLER), he/she **MUST** attain the minimum passing score to successfully complete this program. The One-Day-Tri-Net Program is comprised of appropriate CBT courseware and composite examination with a minimum of 30-questions. The computer scored simulator evaluation run that precedes this exam incorporate many rules that were traditionally given in a written format. The engineer will be given two opportunities to achieve a passing score on the skills performance evaluation runs. If unable to achieve a passing score after the second attempt, the engineer will be re-enrolled in the LER program which requires 90% passing score on the composite examination with a minimum of 100 questions and an actual train ride with a DSLE to satisfy the skill performance requirements.

C. Vision and Hearing Acuity 240.121

Certified employees will have their vision and hearing acuity checked prior to certification or re-certification. Candidates who do not meet the thresholds required in 240.121 will be referred to the BNSF medical examiner to obtain another examination from a licensed ophthalmologist, optometrist, or audiologist. Individuals failing after a second examination could be required by the medical examiner to have a designated supervisor of certified employees accompany the candidate into the work environment and observe their response to visual and/or audible signals. The supervisor will document the results of the field tests and provide that information, as well as information concerning the type of operation and the duties the candidate will be expected to perform, to the medical examiner.

If the medical examiner concludes that, despite not meeting the thresholds, the candidate has the ability to safely operate a locomotive or remote control equipment they will be certified subject to any restrictions the examiner determines in writing to be necessary.

Section 5: Training, Testing and Evaluating Persons Not Previously Certified.

Contact Person: Kathy Conkling

BNSF will typically select candidates from current BNSF train service employees for training, testing and evaluating for the position of train service engineer, remote control operator or locomotive servicing engineer and subsequent certification. Persons selected under these criteria will complete training as outlined in subsection (A), (B) or (C).

BNSF also hires employees who have been certified by other railroads. When hired and the certified employee does not meet the time-frame criteria outlined in 240.217 (c)(2), this person will be evaluated. This evaluation could be conducted by Superintendent of Operating Practices, or Operating Practices group, or members of the Technical Training Staff or the local Road Foreman of Engines. The evaluation will determine which portions of subsection (A) (B) or (C) would be required for training, testing and familiarization trips. Such factors as: previous rules qualification, duration of actual train operation as an engineer, previous training, type of equipment and type of grade conditions operated on will be considered in making the determination. It is anticipated that in most cases a reduced training program will be utilized.

The employee will not be able to operate equipment, other than as a student until he/she meets the criteria determined during the evaluation.

A. Train Service Engineers

The Locomotive Engineer Training Program is approximately 20 weeks in length and includes five weeks of formal classroom training. The skill performance component of the training allows students to experience all types of train operations. The preponderance of the training, however, will be in road service in the form of on-the-job training. The following is a description of the program:

Weeks 1-3: Formal Classroom Training at the Technical Training Center

The first two weeks focus on Air Brake and Train Handling, Safety Rules, General Code of Operating Rules and System Special Instructions. Instruction in the classroom will include verbal, written and simulator demonstrations addressing the operation of locomotive and freight car air brakes systems, required air brake tests, train handling rules and procedures, train handling methods and basic track and train dynamics. Students will put into practice lessons learned in the classroom using locomotive simulators. Additionally operating rules reinforcement will be accomplished through scored simulator exercises.

The third week will provide an introduction to locomotive mechanical systems, daily inspections and distributed power system. Train handling instruction will include heavy grade operation, again with observation and practicing techniques with simulators. Mid-term examinations will be given on ABTH and GCOR. A review of the OJT objectives and requirements will be completed before the student returns to their home territory.

Weeks 4-18: On-the-Job-Training

Weeks four through eighteen will be devoted to On-the-Job-Training at the trainee's home location. Respective DSLE will meet with each student to convey expectations about: (1) the number of trips each student is expected to make, (2) what constitutes satisfactory progress during the OJT period, and (3) the skills each student will need to demonstrate before they can be considered qualified locomotive engineers. The DSLE will also assign each student to a journeyman engineer trainer, assign each student to particular territory(s) and will maintain close contact with each student and each locomotive engineer trainer to monitor each student's progress. Students will complete a log of their training trips. The DSLE will make a minimum of two observation rides with the student during the OJT.

Weeks 19-20: Formal Classroom/Final Examination at the Technical Training Center

The nineteenth week will expand on the operation of Distributing Power trains, review Mandatory Directives and Hazardous Materials, NTSB reports of serious accidents will be discussed. Operations testing and event recorder monitoring process for rules compliance and fuel conservation will be outlined. Simulator training during this week will include Distributed Power and unusual operating conditions. An open book final mechanical exam will be administered.

The twentieth week will include comprehensive GCOR and ABTH review, final examinations for GCOR and ABTH and simulator skill performance evaluations. Upon return to their home territory they will be given a final skills performance evaluation by a DSLE .

The final written examinations will cover the operating rules, air brake and train handling rules and mechanical operations. The minimum passing score will be 90% (89.5% will round up). Questions for the examination are drawn from the Safety Rules, General Code of Operating Rules, Air Brake and Train Handling Rules, Timetable and Special Instructions. Students are allowed to reference the BNSF Locomotive Mechanical and Electrical Systems manual to answer those questions on the examination.

The simulator performance evaluations are conducted on Type II locomotive simulators. Final simulator performance evaluation will consist of two separate runs, each one with a different train and designed to demonstrate different skill sets. Each of the examination runs are approximately one hour in length and a minimum score of 90% is required on each run. The student engineer must make the run alone and without assistance.

Students will be exposed to approximately 34 hours of locomotive simulator training during their five weeks at the Technical Training Center. Students will be paired up during a portion of their simulator time as crew members and will also operate as a single person crew over a varied grade territory. The accumulated time at the controls will be approximately 18 hours. This type of instruction provides an introduction to many operating conditions that may be encountered during actual train operation. Computerized scoring will be used to measure progress and provide student feedback.

BNSF's latest technology in locomotive simulation can duplicate a multitude of unusual conditions and events on specific territories that individuals may be expected to operate on during their training.

Students failing any of the final written examinations or simulator evaluations on the first attempt will be given one more opportunity to successfully pass. The second attempt must be completed between 30 and 90 days of the first failure.

Students successfully passing both written and simulator performance examinations at the Technical Training Center, and who are otherwise eligible, will be designated as entitled for a final evaluation by a DSLE on his/her home territory. The Road Foreman or other qualified DSLE, so designated by the Road Foreman will determine whether the student engineer is to be qualified or disqualified as a locomotive engineer. If, based on the final evaluation, the student is deemed qualified the student is then certified as a Train Service Engineer.

Students who fail the second attempt for the written examination, simulator performance skill evaluation or final train ride evaluation by DSLE will no longer be entitled to progress toward the position of locomotive engineer, and will be governed by their collective bargaining agreement.

B. Remote Control Operators

Remote Control Operators will be trained in accordance with the following guidelines:

After selection, individuals will attend a formal training class at a location designated by the carrier. Instruction will include lecture, field exercises, and a final operating and written examination.

The classroom portion will address the remote equipment and the safety and general rules involving remote operations. The skills performance component of the course includes field operation of the remote equipment.

At the completion of training, the individual will be given a written or CBT based examination consisting of a minimum of 50 multiple choice questions, The minimum passing score is 90% (89.5% will round up). A skill performance examination of at least 1.5 hour's duration will be conducted while the individual is actively engaged in the operation of the remote equipment. The instructor/supervisor will make the determination of pass/fail based on compliance with safety and operating rules, train handling rules, and federal safety rules.

Individuals that fail the written examination on the first attempt will be given remedial training on the questions missed and an opportunity to retake only the questions missed during the second attempt. If a third and/or subsequent attempt are necessary, the individual must retake the examination in its entirety.

Individuals failing the performance examination will receive additional hands on training

with an opportunity to retake the examination as scheduling of the instructor/supervisor permits.

Additional information can be found in Appendix "B" of this submission.

C. Locomotive Servicing Engineers (Hostlers)

Locomotive servicing engineers will be trained in accordance with the following guidelines:

After selection, students will attend three days of formal training at a specific division location or as a participant in new-hire conductor training. Instruction will include lecture, field exercises, and evaluation. The classroom portion will address operating rules instruction. The instructor –led or CBT training modules will cover the General Code of Operating Rules, main track authority, signal system rules along with Air Brake and Train Handling Rules; including required air brake tests and moving locomotives.

The skills performance component includes operation of locomotives with emphasis placed on proper inspection and reporting procedures and multiple unit set-up and operation.

At the completion of training the student will be given a written or CBT based multiple choice examination. A minimum score of 90% (89.5% will round up) is required to successfully pass the examination. A skills performance examination of at least one hour will be conducted by a Designated Supervisor of Locomotive Engineers while the student is actively engaged in the operation of a locomotive. The supervisor will make a determination based on compliance with safety and operating rules, train handling rules, and federal safety rules. The knowledge test answer sheet and the engineer operations report form must be sent to the Manager of Engineer Certification for computer entry and inclusion in the engineer's file.

Students failing either the written examination or performance examination will be given a second opportunity within 30 days of the first attempt. **Students failing the second attempt will fail the program and will no longer be eligible for the position of locomotive servicing engineer**, and will be governed by their collective bargaining agreement.

Section 6: Monitoring Operational Performance of Certified Employees.

Contact Person: Kathy Conkling

A. Monitoring Operational Performance 204.129

BNSF will perform the annual performance monitoring of its certified employees in accordance with the following:

1. Annual Observation.

Each active certified train service engineer, locomotive servicing engineer, or remote control operator will be monitored by a Designated Supervisor of Locomotive Engineers or Designated Supervisor of Remote Control Operators at least once during each calendar year. A skill performance examination as described in sections four and five will satisfy the annual observation requirement for that calendar year.

A certified employee that does not perform service as a train service engineer, locomotive servicing engineer or remote control operator during a calendar year may not receive the annual performance monitoring. Some certified employees may operate equipment in the first few months of the year, but not have the opportunity for the remainder. Subsequently, they may not get a check-ride during that calendar year.

Employees in either situation must receive the annual performance monitoring within 60 days after assuming a certified position.

a. Train Ride

The performance skills of certified employees may be examined while they are at the controls of the type of train or equipment (remote control transmitter) they would be permitted or required to operate. A designated supervisor of certified employees must conduct the examination. The DSLE or DSRC must document observations on an engineer or remote control operations report. The supervisor must inform the engineer or remote control operator of his or her overall performance and explain any needed action that must be taken to correct deficiencies. The date of the operational train ride must be indicated on the certified employee's certificate.

The minimum duration of an operational performance check ride for a train service engineer is two hours or 50 miles during which the engineer is actively engaged in train or locomotive operation. Remote control operators must be observed for a minimum of one hour. Locomotive servicing engineers must be observed for a minimum of 30 minutes.

b. Simulator

A Type II locomotive simulator may be used to satisfy the annual performance monitoring requirement of train service or locomotive servicing engineers. The evaluation utilizing a locomotive simulator will be supervised by a DSLE. Program results may be developed by computer aided processing with a minimum of 90% required for passing. Normally, the DSLE who will be supervising and monitoring the operation during the simulator performance run will be at the Technical Training Center in Overland Park, KS, with the engineer being tested located at a remote NetSim location. The date of the simulator train ride must be indicated on the certified employee's certificate.

Prior to making a run, each engineer will participate in an orientation session relating to locomotive simulator operations and the associated graphic displays. Additionally, each engineer will receive the following information relating to the run: track profile, train consist information, tonnage distribution profile, timetable/special instructions, track warrants and general track bulletins as required.

c. Event Recorder

Analysis of event recorder data may be used to satisfy the annual performance-monitoring requirement. A DSLE will analyze the engineer's skills and operating practices and record the results on the engineer operations report form. This form must be forwarded to the Manager of Engineer Certification. An explanation of any noted deficiencies must be reviewed with the engineer in order for them to make any necessary correction. Within 30 days after the event recorder analysis is complete, the date of the analysis must be indicated on the employee's certificate.

2. Unannounced Operating Rules Compliance Tests.

The required unannounced operating rules compliance tests will be administered through the BNSF Operations Testing Program on file with FRA. Active certified employees will be given at least one unannounced operations test per calendar year. Employees who operate as certified employees in the first few months of the year and do not operate as certified employees again for the remainder of the year may not get an operations test. Employees in either situation must receive the operations test as soon as practical upon assuming a certified position. Types of tests and conditions of tests deemed as qualifying will be determined from studies of previous years safety, accident, derailment, injury, event recorder and operations test data. Operations tests will be distributed at random around the clock and without notice to the certified employee being tested. Test results will not be recorded on the certificate but will be maintained in computer database available for FRA inspection.

Section 7: Procedures for Routine Administration of the Employee Certification Program.

Contact Person: Kathy Conkling

A. General Criteria for Eligibility Based On Prior Safety Conduct - 240.109.

BNSF will evaluate the prior safety conduct of any person considered for qualification as a locomotive engineer or remote control operator. Consideration will be given to relevant data from BNSF records, any other railroad formerly employing the person and any governmental agency with pertinent motor vehicle driving records.

If it is determined that the candidate does not meet the eligibility requirements of 240.115, 240.117, or 240.119, they will be considered ineligible.

1. Prior safety conduct as a motor vehicle operator - 240.115.

Motor vehicle driving records will be obtained and evaluated for incidents described in 240.115. If the records indicate an incident(s) occurred within the time specified, the candidate will be referred to the Employee Assistance Program (EAP) counselor. The counselor must advise the Manager of Engineer Certification of the results of the EAP evaluation as it relates to certification eligibility.

2. Operating rules compliance - 240.117.

An evaluation of operating rules compliance will be made by reviewing a candidate's work record. If the candidate was previously employed by another railroad, they must take the necessary action to obtain a copy of his/her work record from the former railroad.

3. Substance abuse disorders - 240.119.

Employees who are determined to have active substance abuse disorders will not be certified or allowed to remain certified.

B. Determinations required as a prerequisite to certification - 240.203.

Certification candidates must meet the requirements of this program to be certified or re-certified.

C. Time limitations for making determinations - 240.217.

Certification requirements must be met with the time frames set forth in 240.217 as follows:

Safety conduct record	366 days
Vision and hearing acuity	366 days (24 months for students)
Written knowledge test	366 days
Skills performance test	366 days
Reliance on another railroad	36 months
Issue certificate within	30 days of a decision to certify

The Manager of Engineer Certification, or a representative, will verify that the necessary determinations have been made within the time frames before concluding that the candidate is qualified.

D. Denial of certification - 240.219.

When information is discovered which forms a basis for denying certification, the candidate will be advised in writing and given an opportunity to respond. If certification is subsequently denied, the candidate will be notified in writing within 10 days of that decision.

E. Reliance on qualification determination by another railroad - 240.225.

BNSF may rely on qualification determinations made by another railroad subject to the provisions of 240.201, 240.217(c)(2) and 240.307. An eligible engineer or RCO certified by another railroad who is subsequently employed by BNSF will be evaluated. This evaluation could be conducted by Superintendent of Operating Practices, or Operating Practices group, members of the Technical Training staff or the Road Foreman of Engines. The evaluation will review each individual and make a determination on the required training, testing and familiarization trips. Such factors as: previous rules qualification, duration of actual train operation as an engineer or RCO, previous training, type of equipment and type of grade conditions operated on will be considered in making the determination.

The engineer or remote control operator will not be able to operate other than as a student, until he/she meets the criteria established during the evaluation.

F. Reliance on qualification requirements of other countries - 240.227.

BNSF may rely on qualification determinations made by a Canadian railroad subject to the provisions of 240.227.

G. Requirements for joint operations territory - 240.229.

BNSF will keep on file a listing of certified engineers and remote control operators for purposes of joint operations as required by 240.221. The listing will be updated at least annually.

H. Replacement of certificates - 240.301.

A lost, stolen or mutilated certificate will be replaced after verification that the certification is still valid in accordance with 240.201, 240.217, and 240.307. The Manager of Engineer Certification, or her representative, will generate replacement certificates and distribute by US Mail. Designated individuals are authorized to issue temporary certificates. A temporary certificate will be effective until the replacement certificate is received, but not to exceed 30 days.

I. Revocation of certification - 204.307.

A review of an engineer's or RCO certification will be initiated promptly upon any occurrence of conduct described in 240.117(e). Certification will be suspended pending a hearing, which will be consolidated with the formal investigation required by the collective bargaining agreement. An engineer or RCO who chooses to waive his or her rights to a formal investigation will also be allowed to waive the hearing required by 240.307. BNSF has further defined the conduct described in 240.117(e) in a document titled "BNSF Engineer Certification - Suspension and Revocation Policy". That policy is included as Appendix A of this program.

J. Return to Active Status -

BNSF currently has a system policy covering reinstatement of Train, Engine and Yard employees who have been absent from service for a period of more than six months. Certified employee must complete Form 1690-A (735-question open book exam) and undergo recertification or current biennial rules training in Computer Based Training (CBT) prior to performing service.

The Road Foreman of Engines, and Senior Manager Engineer Training/Certification will evaluate certified engineers or RCO who subsequently have their certification lapse while in inactive status. The evaluation could be conducted by local Road Foreman of Engines or Senior Manager Engineer Training/Certification. The evaluation will determine any required training, testing and familiarization trips. Such factors as: previous rules qualification, duration of actual train operation as an engineer, or RCO, previous training, type of equipment and type of grade conditions operated on will be considered in making the determination.

The engineer or RCO will not be able to operate, other than as a student, until he/she meets the criteria established during the evaluation.

Appendix A to the BNSF Employee Certification Program April 8, 2003

Certification Suspension and Revocation Policy

240.117 and 240.307 require railroads to examine incidents in which certified employees may have violated operating rules, safety rules or procedures intended to ensure the safe operation of trains or remote control equipment. An individual who has dual certification, will not be able to perform duties in either class of service until the period of ineligibility has been served.

The regulation requires that certified employees who have demonstrated a failure to comply with railroad rules and practices as described in 204.117 paragraphs (e)(1) through (6) have their certification revoked per 240.117(c). Certification will be revoked for violations described in 240.117(e)(1) through (5) as follows:

1. First violation, revocation will be for one month (30 days).
2. Two separate violations within 24-months, revocation will be for six months.

Revocation for violations described in 240.117(e)(1) through (6) as follows:

3. Three separate violations within 36-months, revocation will be for one year.
4. Four separate violations with 36-months, revocation will be for three years.

Note: Incidents involving 240.117(e)(6) deals with alcohol and drug rules and have different periods of ineligibility. The requirements for handling these violations are covered later in this policy.

If a single incident involves more than one of the specified rule violations, that incident will be treated as a single violation for the purpose of revocation.

In accordance with certain provisions of the regulation, a person may be allowed to return to work after serving at least one half of the pertinent period of ineligibility. Language relevant to this provision may be found in Part 240.117, (h), (1 through 5) allowing employees to return to work after serving half the revocable time if they meet the pertinent conditions of the regulation.

A period of ineligibility shall begin for a person not currently certified on the date the railroad's written determination that the most recent incident has occurred. For a person currently certified, ineligibility shall begin on the date the railroad's notification to the person that re-certification has been denied or certification has been revoked.

The regulation requires that each railroad establish its criteria for revocation of a certified employee's certificate. The following are some guidelines for identifying conduct that requires the revocation of a certificate. BNSF will not attempt to describe every possible incident that may result in suspension/revocation, therefore, each case will be reviewed on its own merit.

1. Signal Indications:

240.117 (e)(1) "Failure to control a locomotive or train in accordance with a signal indication, excluding a hand or a radio signal indication or a switch, that requires a complete stop before passing it."

The following are considered stop signals for the purpose of this regulation:

- a. Active stop signals e.g. block or interlocking signals which require a complete stop before passing.
- b. Passive stop signals e.g. red track flags, blue signals, stop signals or gates which require a complete stop before passing.
- c. Unattended fusees and STOP banners used in conjunction with GCOR 6.27 or 6.28 are considered the functional equivalent of stop signals.

2. Train Speed:

240.117(e)(2) "Failure to adhere to limitations concerning train speed when the speed at which the train was operated exceeds the maximum authorized limit by at least 10 miles per hour."

- a. Speeding as described above is a violation. Maximum authorized speed is defined as the maximum allowable speed a train or engine is authorized to operate for a given operating situation. For example:

Maximum authorized speed is 50 MPH, 60 MPH or higher is a violation.

Maximum speed specified in special instruction is 60 MPH and signal indication requires movement at 35 MPH; 35 MPH is the maximum authorized speed for the situation. 45 MPH or higher is a violation.

Maximum speed specified in special instruction is 60 MPH and restricted speed is required by rule or signal indication; 20 MPH is the maximum authorized speed for the situation. 30 MPH or higher is a violation.

- b. Violations of "A speed that allows stopping within half the range of vision" as required by GCOR. 6.27 "Movement at Restricted Speed" or 6.28 "Movement on Other than Main Track" which results in FRA reportable accidents or incidents under 49 CFR Part 225. For example:

Failure to stop short of train, engine, railroad car or equipment fouling the track, or a switch or derail lined improperly, resulting in property damage exceeding the current FRA reporting threshold or a FRA reportable personal injury, is a violation.

- c. Violations of any one of the other provisions of 240.117(e) while operating at restricted speed are subject to revocation. For example:

A person operating a locomotive at restricted speed could be found to have violated 240.117(e) (1) if he or she failed to stop at a signal that required a complete stop before passing it; any reference to damage thresholds would not be applicable since the other provision of 240.117(e) was simultaneously violated.

3. Air Brake Tests:
240.117(e)(3) "Failure to adhere to procedures for the safe use of train or engine brakes when the procedures are required for compliance with the initial terminal, intermediate terminal, or transfer train and yard test provisions of 49 CFR Part 232 or when the procedures are required for compliance with the class 1, class 1A, class 3, or running brake test provisions of 49 CFR Part 238.

- a. Failure to perform the required initial, transfer, intermediate terminal or running air brake test as specified by Air Brake and Train Handling rules is a violation.

The following Air Brake and Train handling rules will be considered for the purpose of revocation:

100.10 (Class 1)	Initial Terminal Air Brake Test
100.11	Transfer Train and Yard Movement Test
100.12 (Class 1A)	Intermediate Brake Test
100.13	Running Air Brake Test for passenger trains
100.15	Application and Release Test

Required locomotive air brake tests are not addressed in this regulation and will not be considered for suspension or revocation.

4. Main Track Authority:
240.117(e)(4) "Occupying the main track without proper authority or permission."

For this regulation, main track means a track upon which the operation of trains is governed by one or more of the following methods of operation: timetable, mandatory directive, signal indication, or any form of absolute or manual block system. Mandatory directive does not include occupying a segment of track contrary to advisory information, such as that from a yardmaster relative to which track to use in a yard.

Occupying a main track or a portion of a main track without proper authority as specified in GCOR 6.2, GCOR 6.3 or permission per rule 15.2 is a violation.

Operating on a portion of main track when permission/authority is required by the requirements of GCOR 15.2. Incidents in which a STOP SIGNAL (Red flag) or STOP in the stop column is involved will be considered violations of item 2, train speed.

5. Tampering with Safety Devices:
240.117(e)(5) "Failure to comply with prohibitions against tampering with locomotive mounted safety devices or knowingly operating or permitting to be operated a train with an unauthorized disabled safety device in the controlling locomotive."

Unless authorized, rendering a device inoperative or impairing the intended function of a
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locomotive mounted safety device is a violation.

Locomotive mounted safety devices including, but not limited to: event recorders, alerter, dead man controls, automatic cab signals, cab signal whistles, automatic train stop equipment and automatic train control equipment.

6. Alcohol and Drug:

240.117(e)(6) "Incidents of Noncompliance with 49 CFR Part 219.101 of This Chapter."

219.101 reads in part:

- (a) Prohibitions - Except as provided in 219.103 (Prescribed and over-the-counter drugs) -
- (1) No employee may use or possess alcohol or any controlled substance while assigned by a railroad to perform covered service;
 - (2) No employee may report for covered service, or go on or remain on duty in covered service while -
 - (i) Under the influence or impaired by alcohol.
 - (ii) Having .04 percent or more alcohol in the blood; or
 - (iii) Under the influence of or impaired by any controlled substance.

An employee assigned to perform covered service who is subjected to a breathalyzer or blood test and the result of the test is determined to be positive for alcohol (.04 percent or more alcohol in the blood) is in violation of 49 CFR Part 219.101.

Noncompliance with 49 CFR Part 219.101 is a violation of 240.117(e)(6) and the first offense is a mandatory NINE-month revocation.

The presence of a controlled substance in the body fluid does not necessarily indicate impairment. Therefore, for the purpose of revocation, an employee in covered service that tests positive for a controlled substance is in violation of 49 CFR Part 219.101 if it can be determined that they were under the influence or impaired. If not, the employee is in violation of 49 CFR Part 219.102.

49 CFR Part 219.102 reads in part:

"No employee who performs covered service may use a controlled substance at any time, whether on duty or off duty, except as permitted by 49 CFR Part 219.103 of this part (Prescribed and over-the-counter drugs)."

Noncompliance with 49 CFR Part 219.102 is not a violation of 240.117(e)(6) and is, therefore, not a revocable offense. However, these violations must be tracked and the employee must be referred to the employee assistance counselor. The employees certificate will be deemed suspended (not revoked) during evaluation and any required treatment. Different periods of ineligibility for subsequent violations are listed in 240.119(c)(4).

This policy is to establish guidelines for identifying conduct that constitutes the revocation of certified employee's certificate. Any instances in question should be directed to the Manager of Engineer and Remote Control Certification in Overland Park, Kansas or

Operating Practices for clarification.
Appendix “B” Remote Control Operator

Remote Control Operation Training

Program Overview

Introduction	This outlines a program for the initial education of a ground employee who will operate remote control equipment.
Assumptions	These individuals are qualified in Hazmat, Operating and Air Brake rules, and Switching Operations.
Instructional Strategies	The program would consist of but not be limited to classroom instruction with study material, field training, proficiency-skill evaluation, at the location, which is specific to the operation, and a written examination.
Materials	Remote Operators Training Manual (used in class) Daily Study Material Remote Operation Job Aid (pocket guide) Required Company Material (Special Instructions, Rule Book Inserts) Field Proficiency Skills Form (Completed by the instructor/mentor)
Course Timeline	1.5 days classroom instruction 2.5 days field training 1.0 day for final operating/written examination
Total hours	80 5.0 day’s field training and demonstration of skill proficiency under the direction of a qualified employee who has been appropriately trained and qualified as determined by the railroad.

Daily Overview

Day One

Learning Objectives Individuals will understand the:
Main components of the Locomotive Computer Unit (LCU),
Operator Control Unit (OCU)
Proper positioning of the equipment controls and switches

Learning Outcomes Identify and describe how the LCU and OCU relate to each other
Describe LCU equipment setup and operation
Setup cab controls and switches for remote operation
Describe the start up, shut down and inspection of remote control equipment
Describe OCU equipment operation
Describe the safety controls and understand results of error message

Content Safety Briefing
 Introduction to the program
 Required paperwork
 Definitions
 Inspection and Setup of Equipment
 Basic Car Air
 Introduction to the Locomotive Computer Unit (LCU)
 Introduction to the Operator Control Unit (OCU)
 Study Material

Day Two, Three, Four

Learning Individuals will understand:
Objectives Related ground equipment
 And be able to:
 Trouble shoot conditions or faults
 Learn proper/safe yard procedures.

Learning Describe LCU trouble shooting procedures
Outcomes Be able to locate and rectify basic equipment and system faults and
 understand whom to contact when necessary
 Describe digital talk-back messages and respond properly
 Perform proper/safe yard procedures and operations

Content Classroom:
(Classroom & Review Study Material
Switching Introduction to Ground Based Equipment
Yard) Introduction to Safety Controls
 Trouble Shooting
 Operating & Safety Rules
 Switching Yard
 Train Operations

Day Five Testing Procedures
Outcome

Content Written examination
(Classroom & Proficiency Skills Evaluation
Switching
Yard)

Day Six - Ten

Learning Individuals will use remote equipment to switch cars, move cars from
Objectives yard to yard, to industries and/or interchange points and service
 industries as needed, and perform required inspections and tests.

Learning Outcomes	Describe and perform what is required when commencing duty Describe and perform all the required tests of the system and what is required to properly take charge of and secure a remote controlled unit Perform remote control operations covering a broader range of assignments and complexities
Content (Switching Yard)	Hands on operation on specific assignments that operate using remote control equipment under supervision of a qualified employee who has been appropriately trained and qualified as determined by the railroad.

Appendix “C” Electronic Train Management System

ETMS Training for Locomotive Engineers

Program Overview

Introduction This outlines a program for the initial education of a locomotive engineer, who will operate an ETMS equipped train or engine.

Assumption The individual is certified as a Train Service Engineer or Student Engineer.

Training will consist of two steps:

- A) Classroom training and familiarization,
- B) Skill set evaluation.

Locomotive engineers not previously trained on ETMS will attend classroom training that utilizes a suite of presentation materials, a pocket guide and video clips for system orientation. A migration to computer based training (CBT) modules is under development and will be used in lieu of classroom training.

Familiarization with ETMS equipment will be accomplished through a minimum of one on board trip with a DSLE with ETMS in operation, or a trip in a locomotive simulator equipped to emulate ETMS functionality.

The skill set evaluation will be conducted on board an ETMS train initially. A locomotive simulator system is planned to be the primary ETMS familiarization and evaluation method once development is complete. The evaluation to qualify an engineer will be performance based and may be conducted during the familiarization trip. Additional instruction and /or trips may be required to reach the required proficiency.

A) Classroom materials and future CBT will address the following items:

1. Acquaint the Engineer with train control equipment onboard the locomotive and the functionality of that equipment as part of the system and in relation to other onboard systems under that person's control through:
 - A comprehensive overview of Electronic Train Management System that includes an explanation of dispatcher, track condition, signal and switch position interfaces will be covered through classroom or CBT.
 - An overall theme stressing that although ETMS is a safety-critical overlay system designed to provide a layer of safety with penalty braking when locomotive engineer inattentiveness occurs, it must not be relied on to stop the train. The locomotive engineer's responsibility and actions required to operate within the limits of authority and speed do not change from non-ETMS equipped trains

2. Any actions required of the onboard personnel to enable, or enter data to, the system, such as consist data, and the role of that function in the safe operation of the train will include:
 - Setup steps and required tests to be made by the engineer to enable ETMS will be covered during training. The engineer will demonstrate these operations and skill sets on board the locomotive or in the simulator. The importance of maintaining correct train consist information will be covered in the training material.
3. Sequencing of interventions by the system, including pre-enforcement notification, enforcement notification, penalty application initiation and post-penalty application procedures will include:
 - ETMS progression to enforcement, levels of notification and recovery procedures will be covered in the initial training. Demonstration of enforcement may be limited to simulated operation.
4. Railroad operating rules applicable to the train control system, including provisions for movement and protection of any unequipped trains, or trains with failed or cut-out train control onboard systems and other on-track equipment will include:
 - Specific territory requirements will be covered during the initial training at each location.
5. Means to detect deviations from proper functioning of onboard train control equipment and instructions regarding the actions to be taken with respect to control of the train and notification of designated railroad personnel will include:
 - ETMS failure modes and prescribed procedures to report exceptions will be covered in the training. A simulator may be used to demonstrate failure modes.
6. Information needed to prevent unintentional interference with the proper functioning of onboard train control equipment.

B) The evaluation of the skill set for locomotive engineers will be performed through a check-ride or future simulator demonstration that includes the following items:

1. Demonstration of proper setup, testing and activation of system. Engineer must also demonstrate recognition of system progression toward braking enforcement.
2. Acceptance of dispatcher issued restrictions or authorities.
3. Incorporate failure scenarios, acceptable performance will include recognition and initiating proper steps to cut out the ETMS equipment and required notification.

4. Acceptable performance during train operation with ETMS active would include no enforcement braking events and the engineer's ability demonstrate normal train handling duties with out distraction, interference or reliance on ETMS.

The BNSF maintains a database for locomotive engineer training certification. The information that pertains to the training and certification of ETMS will be included into this database. Locomotive engineer ETMS re-training will be incorporated with Triennial Recertification (Three Year Cycle). This re-certification training will include CBT refresher training and a competency demonstration ride that includes both ETMS equipped and non-equipped locomotives (The non-equipped training is to ensure that the locomotive engineer can run the train properly without relying on the ETMS system).