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**BEFORE THE
SURFACE TRANSPORTATION BOARD**

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UNITED STATES ENVIRONMENTAL)	March 28, 2014
PROTECTION AGENCY – PETITION FOR)	Part of
DECLARATORY ORDER)	Public Record
)	

Finance Docket No. 35803

SUPPLEMENTAL COMMENTS

OF THE

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

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In accordance with the Board’s Order served on February 26, 2014 in this proceeding, the South Coast Air Quality Management District (the “District”) submits these Supplemental Comments on the issues raised by the January 24, 2014 Petition for Declaratory Order filed by the U.S. Environmental Protection Agency (“EPA”) (“Petition”).

INTRODUCTION

A description of the District and its interests in this proceeding are included in its February 14, 2014 Reply to the EPA Petition. Therein, the District also provided evidence and legal argument demonstrating clearly that the Board should grant the Petition, and issue a declaratory order confirming that District Rules 3501 and 3502 would not be preempted by the Interstate Commerce Commission Termination Act of 1996, 49 U.S.C. § 10101 *et seq.* (“ICCTA”), once they are incorporated by EPA into the California State Implementation Plan (“SIP”) under the Clean Air Act, 42 U.S.C. § 7401 *et seq.* (“CAA”).

In these Supplemental Comments, the District offers additional and updated evidence and further details the arguments and legal authorities that support the harmonization of Rules 3501 and 3502 with the ICCTA, and the conclusion that their enforcement as part of the California SIP neither directly regulates railroad operations, nor unreasonably interferes with interstate commerce. The District also explains why the contrary positions advanced in the February 14, 2014 Replies filed by the Association of American Railroads (“AAR Reply”), BNSF Railway Company (“BNSF Reply”), Union Pacific Railroad Company (“UP Reply”) and Norfolk Southern Railway Company (“NS Reply”)¹ are without merit, and cannot justify the Board taking the unprecedented step of declaring that a federal environmental law – which a SIP that includes the Rules would be – is preempted by the ICCTA.

The District reserves the right to respond further to any additional comments or arguments that may be presented by the Railroads or other parties, on or before the date set by the Board for the submission of Reply Comments, which currently is April 14, 2014.

¹ AAR, BNSF, UP and NS sometimes are referred to herein as the “Railroads.”

PRELIMINARY MATTERS

The District respectfully reiterates its previously-stated position that EPA's request to the Board for advice on the harmonization of a California SIP that includes Rules 3501 and 3502 with the ICCTA was not legally necessary. The decision whether to approve the request of the California Air Resources Board ("CARB") to modify the SIP by incorporating the Rules is the responsibility and prerogative of EPA under its own enabling statute; the ICCTA does not establish any role for the Board in that determination.² EPA's Petition reflects that it was filed in furtherance of its deliberations under 42 U.S.C. § 7410(a)(2)(E)(i),³ and the District's participation is for the purpose of assisting the Board in responding to this advisory request, and ensuring that the public health rights and interests of the 16 million citizens who live and/or work within the boundaries of the South Coast Air Basin are represented in this proceeding. As a matter of law, however, authority and responsibility for determining whether the Rules should be enforceable parts of the California SIP rest with EPA.

A second point of clarification which should be established at the outset concerns the legal standard that the Board should apply in considering EPA's Petition. Not surprisingly,⁴ the Railroads urge that the Board evaluate Rules 3501 and 3502 as if

² See CARB Reply at 1-2.

³ Petition, at 5.

⁴ As the District pointed out in its Reply (at 21, 26, 37-39) and further demonstrates in these Supplemental Comments, the Railroads voluntarily employ idling reduction strategies that are similar if not identical to those that are the subject of the Rules, generally in furtherance of their own interests in improved fuel efficiency. Viewed from a broader perspective, it seems clear that their principal motivation for opposing inclusion

they were local ordinances subject to standard state vs. federal preemption analysis under 49 U.S.C. § 10501.⁵ While lip service is paid to the principle that federal enactments must be harmonized,⁶ the Railroads' core argument appears to be that any influence on a carrier's idling practices constitutes interference that warrants preemption,⁷ and that the Board should accept the 2007 decision of the U.S. District Court for the Central District of California⁸ as dispositive on the issue.⁹ However, the court's rulings in *AAR v. SCAQMD* have *no* precedential impact for purposes of this proceeding.

As discussed in further detail in the District's Reply and in Part II, *infra*, the District Court's 2007 reasoning and preemption analysis was predicated *specifically* on the finding at the time that the District's Rules were not proposed under the CAA, which would have required a harmonization approach to the Railroads' claims of conflict with the ICCTA. *See AAR v. SCAQMD* at *5-6. Judge Walter therefore applied the standard test for preemption of local regulations that impact railroad activities governed by the ICCTA (the same test that the Railroads advocate here). *Id.* at *7. As the Ninth Circuit's

of the Rules in the California SIP springs not from a concern over operational interference or a burden on commerce, but rather from a desire to avoid mandatory emissions limitations of any kind. However, questions of preemption or the harmonization of federal laws should not turn on the Railroads' preferences.

⁵ *See* AAR Reply at 4, 13-14, 19; BNSF Reply at 15-17, 23.

⁶ *E.g.*, AAR Reply at 25-26; BNSF Reply at 23-25.

⁷ *E.g.*, AAR Reply at 14-15; BNSF Reply at 15-16; UP Reply at 16-18.

⁸ *Ass'n of Am. R.R. v. S. Coast Air Quality Mgmt. Dist.*, No. CV 06-01416-JFW, 2007 WL 2439499 (C.D. Cal. Apr. 30, 2007) ("*AAR v. SCAQMD*").

⁹ AAR Reply at 12, 14-15; BNSF Reply at 16; UP Reply at 16-17.

decision on review made clear, however, once the Rules are part of an EPA-approved SIP, and have the force of federal law,¹⁰ a very different standard applies, one which requires the Board “to harmonize the District’s rules with ICCTA.” *Ass’n of Am. R.R. v. S. Coast Air Quality Mgmt. Dist.*, 622 F.3d 1094, 1098 (9th Cir. 2010) (“*Association of American Railroads*”). *Inter alia*, this involves both a presumption that the later-enacted ICCTA should not be interpreted to limit by implication the reach of the CAA,¹¹ and a standard that places the District’s Rules “outside the scope of § 10501(b) preemption, unless the [CAA is] being used to regulate rail operations or being applied in a discriminatory manner against railroads.” *Grafton & Upton R.R. Co. – Petition for Declaratory Order*, STB F.D. No. 35779 at 6 (STB served January 27, 2014) (“*Grafton*”).¹² As shown in the District’s Reply, the proper scope of the Board’s inquiry into whether the CAA is being used to “regulate rail operations” is whether the Rules intrude on matters *directly* regulated by the Board (*e.g.*, railroad rates, routes, construction, etc.), or whether they impose an unreasonable burden on railroad operations as a matter of actual fact. *See* District Reply at 14-15; *Grafton* at 4, 6. As further

¹⁰ *Safe Air for Everyone v. EPA*, 488 F.3d 1088, 1091 (9th Cir. 2007).

¹¹ *Nat’l Ass’n of Home Builders v. Defenders of Wildlife*, 551 U.S. 644, 662 (2007).

¹² The proper standard also precludes reliance on any of the District’s Court’s “factual” findings regarding the Rules, as Judge Walter by his own admission made no effort to harmonize the Rules with the ICCTA. As he opined before turning to a discussion of the trial record, “[a]s a result of the Court’s finding that the District did not derive its authority...from the CAA, the Court need not ‘harmonize’ or reconcile the ... ICCTA with the mandates of the CAA.” *AAR v. SCAQMD* at *6.

demonstrated in these Supplemental Comments, when this standard is applied properly the Rules are fully enforceable as part of the California SIP.

Third, the Railroads' suggestion that inclusion of the Rules in the SIP is simply a "pretext" to be ignored¹³ should be dismissed summarily. When the Board has used the term "pretext" in evaluating a state or local agency's reliance on environmental law, the context has been one in which the agency was invoking federal law "to permit local communities to hold up or defeat the railroad's right to construct facilities...." *Joint Petition for Declaratory Order – Bos. & Me. Corp. and Town of Ayer, MA*, 5 S.T.B 500, 509 (2001). In that case, the Board concluded that the Town was using environmental statutes "as a pretext to do what Congress expressly precluded: interfere with interstate commerce by imposing a local permitting or environmental process as a prerequisite to the railroad's ability to conduct its operations." *Id.* Significantly, there was no SIP or other federal action at issue there, and the record reflected reasons to doubt the Town's motives, chief among them the fact that the state environmental agency had found that the new facility posed no threat to the local water supply. *See id.* The lesson drawn from that portion of the Board's decision and others like it is that where a state would be preempted from imposing permitting or preclearance requirements (also referred to as "prior restraints") on a railroad's operations, federal environmental laws may not be used

¹³ *See* BNSF Reply at 21; AAR Reply at 18. The Railroads cite to a footnote in the District Court's decision (*AAR v. SCAQMD* at *6 n.6) that mistakenly stated that the CAA was "never mentioned" during the District proceedings in which the Rules were developed. As shown in the District's Reply (*see, e.g., Wallerstein V.S.*, p. 10), this is factually incorrect.

as a “pretext for frustrating or preventing” that activity, at least where there is strong evidence that no actual threat to the environment existed. Nevertheless, the Board affirmed that in general, “nothing in section 10501(b) is intended to interfere with the role of state and local agencies in implementing Federal environmental statutes, such as the Clean Air Act....” 5 S.T.B. at 508. In stark contrast, the present case involves no preclearance, permitting or prior restraint, and the state agency (CARB) supports the Rules as an important component of California’s policy initiatives to achieve clean air. The staff reports prepared in connection with the Rules’ adoption explained the particulate matter (“PM”) and nitrogen oxide (“NOx”) emissions reductions that were expected to result,¹⁴ and the adoptive resolution itself references the need for the Rules to help meet state and *federal* ambient air quality standards,¹⁵ including those under the CAA.

Finally, the Board properly must reject AAR’s and UP’s gymnastic reading of the CAA,¹⁶ and address EPA’s Petition based on the assumption that the Rules are part

¹⁴ See District Reply, Wallerstein V.S. at 10.

¹⁵ *Id.*, Nakamura V.S., Exh. 3 at 4.

¹⁶ See AAR Reply at 19-20; UP Reply at 14-16. Their circular and result-oriented argument (that the acknowledged legal effect of including the Rules in the SIP should be ignored because of the District Court’s conclusion regarding the status of the Rules *before* they are part of the SIP) creates a classic “Catch-22”, and completely ignores the Ninth Circuit’s ruling that EPA could adopt the Rules into the SIP and thereby qualify them for a harmonizing analysis. 622 F.3d at 1098. It also is contradicted by the representation of the Railroads’ own counsel before that court. See District Reply at 6-7.

of the California SIP.¹⁷ That is the context in which EPA posed its question,¹⁸ and it is consistent with the plain language of the CAA, which provides that a SIP shall:

[P]rovide [] necessary assurances that the State (or, except where the Administrator deems inappropriate, the general purpose local government or governments, or a regional agency designated by the State or general purpose local governments for that purpose) *will* have adequate personnel, funding and authority under State (and, as appropriate, local) law to carry out such implementation plan (and is not prohibited by any provision of Federal or State law from carrying out such implementation plan or portion thereof).

42 U.S.C. § 7410(a)(2)(E) (emphasis added).

Appellate decisions construing the statutory language confirm that its focus is on the enforceability of provisions *following* their inclusion in a SIP, not before. *See, e.g., Env'tl. Def. v. EPA*, 369 F.3d 193, 208-209 (2nd Cir. 2004) (Section 7410(a)(2)(E) found satisfied even though the state agency had to complete a post-SIP rulemaking in order to adopt the required measures); *Ober v. EPA*, 84 F.3d 304, 312 (9th Cir. 1996) (state law included contingency provisions to allow changes in enforcement options). *See also, Am. Petroleum Inst. v. Jorling*, 710 F.Supp. 421, 433 (N.D. N.Y. 1989). California law currently vests the District with authority to enforce the SIP within its boundaries, as part of its mandate to “enforce all applicable provisions of state and federal law” respecting air emissions. *See* CAL. HEALTH & SAFETY CODE (“CHSC”) § 40001(a). *See also,*

¹⁷ *See Comments of U.S. EPA, U.S. EPA- Petition for Declaratory Order*, F.D. 35803 (Mar. 25, 2014) (“EPA Comments”).

¹⁸ Petition at 2 (the question posed is whether “the State would be prohibited under ICCTA from carrying out the Rules [3501 and 3502] if they were approved into the SIP.”).

CHSC §§ 41510-41513 and 42400, *et seq.* EPA has sought the Board’s advice regarding accommodation of the Rules as part of the SIP with the provisions of the ICCTA. Logic and the law compel an analysis that presumes the Rules have that status. *See* EPA Comments at 1-2.

ARGUMENT

I. **Reducing Locomotive Emissions Is Essential to Public Health and Sound Public Policy for Southern California**

The CAA and the ICCTA share common ground in the promotion of public health as a national legislative policy goal. The central purpose of the CAA is “to protect and enhance the quality of the Nation’s air resources so as to promote the health and welfare and the productive capacity of its population.” 42 U.S.C. § 7401(b)(1). The National Rail Transportation Policy goals adopted in the ICCTA include as a priority the operation of transportation facilities “without detriment to the public health and safety.” 49 U.S.C. § 10101(8). There are few regions of the country where these complementary imperatives are brought into sharper relief than the South Coast Air Basin.

For many years, the particular needs of the California South Coast Region for significant reductions in PM and NOx have been highlighted by EPA.¹⁹ A key source of these pollutants in the Region are idling freight locomotives, due to the high concentration of rail freight traffic and railyard activity in the area. Diesel locomotive emissions contain dangerous levels of carcinogenic material, as confirmed by scientific

¹⁹ *See, e.g.*, Control of Emissions of Air Pollution from Locomotive Engines and Marine Compression-Ignition Engines less than 30 Liters per Cylinder; Republication, 73 Fed. Reg. 37,096, 37,101 (June 30, 2008) (Final Rule).

studies conducted by CARB, EPA and the International Agency for Research on Cancer (*see* District Reply at 8-9, Wallerstein V.S. at 9), and the South Coast Air Basin is home to several railyards which pose particularly high health risks. *Id.* As the District demonstrated in its Reply, the scientific case for a public policy initiative to further reduce diesel locomotive emissions in Southern California is compelling. *See* District Reply at 8, 23-24; Wallerstein V.S. at 4-7; Nakamura V.S. at 6-7.

Also beyond serious dispute is the fact that these adverse health impacts are felt most acutely by some of the most vulnerable among the residents of Southern California, including lower income citizens who lack the resources to relocate easily or the economic and/or political power to persuade the Railroads to take additional steps to reduce emissions voluntarily. The public policy imperatives implicated by these facts are confirmed by EPA's record of enforcement in other, similar circumstances. For example, in 2010, EPA and the Department of Justice negotiated a precedent-setting settlement for 33 incidents of excessive locomotive idling in violation of the Massachusetts SIP's provisions. The Justice Department stated: "The settlement will provide immediate and lasting environmental benefits to the residents of Eastern Massachusetts, particularly those in environmental justice communities." The EPA Regional Administrator elaborated: "It is imperative that anti-idling laws are followed, given the proximity of these layover facilities to densely-populated communities and environmental justice neighborhoods. ...Diesel pollution can be very harmful, especially to sensitive

populations such as the young, elderly, and people who suffer from asthma.”²⁰

According to EPA, low-income and/or minority residents in environmental justice communities are “often subject to multiple pollution sources and can be at greater risk for cumulative health impact.”²¹

As was documented in the Reply to EPA’s Petition filed by the East Yard Communities for Environmental Justice, from the time of initial development of the Rules by the District through the EPA’s own recent deliberative review, citizens who live close to the Southern California railyards consistently and persistently have provided evidence and testimony establishing both the magnitude of the emissions problem, and the fact that it has not been abated meaningfully by the Railroads’ voluntary actions. As mandated by the President’s 2011 Environmental Justice Memorandum of Understanding,²² consideration of the public policy implications of EPA’s proposed

²⁰ See Press Release, DOJ, Mass. Bay Transp. Auth. To Spend Millions to Reduce Commuter Train Emissions in Clean Air Act Settlement (Aug. 4, 2010) *available at* <http://www.justice.gov/opa/pr/2010/August/10-enrd-896.html> (Official Notice Tab, Exh. 1).

²¹ U.S. EPA, *Clean Air Act Settlement with the Mass. Bay Transp. Auth. (MBTA) & Mass. Bay Commuter R.R. Co. (MBCR) for Commuter Train Idling Violations*, U.S. EPA Fact Sheet 3 (Aug. 4, 2010), <http://www.epa.gov/region1/enforcement/air/pdfs/CAA-MBTA-MBCR-Fact-Sheet.pdf> (Official Notice Tab, Exh. 2).

²² See District Reply at 9-10. See also Mem. of Understanding on Env’tl. Justice and Exec. Order 12898 *available at* <http://epa.gov/environmentaljustice/resources/publications/interagency/ej-mou-2011-08.pdf> (Official Notice Tab, Exh. 3); *Obama Admin. Issues Env’tl. Justice MOU*, Ctr. for Effective Gov’t (Aug. 16, 2011), <http://www.foreffectivegov.org/node/11826> (MOU signed Aug. 4, 2011).

inclusion of the Rules in the California SIP (and the Railroads' opposition) must take these environmental justice impacts into account.

II. The District Has The Authority and Responsibility to Enforce the SIP

A. The District's Authority Extends to Enforcement of The Rules as Part of the SIP

The authority of the District to submit the Rules to CARB for proposed inclusion in the California SIP, and its power under California law to enforce them as part of the SIP, are not questions properly before the Board in this proceeding, or within the scope of the Board's jurisdiction under 49 U.S.C. §§ 721 or 10501.²³ However, both BNSF and UP have sought to muddy the waters by arguing that because District Judge Walter ruled that the District could not promulgate the Rules as local regulations and issued an injunction against them, the Rules should be deemed preempted by the ICCTA.²⁴ The Railroads are wrong on the law, and on the effect of Judge Walter's injunction. The District had full authority under California law to propose the Rules to CARB, and likewise has the power under state law to enforce them as part of the SIP.

California's air pollution control districts are responsible for promulgating and enforcing regulations to implement and promote the achievement of state and federal air quality standards. *See* CHSC § 40001. CARB expressly has confirmed that "[b]oth

²³ As discussed *supra*, for purpose of this declaratory order proceeding it must be taken as given that EPA has concluded both that public policy as reflected in the CAA supports inclusion of the Rules in the SIP, and that so long as they are not preempted by the ICCTA, they would be enforceable as part of the SIP.

²⁴ *See* BNSF Reply at 20-25; UP Reply at 15-16.

CARB and the districts have a role addressing railroad emissions, CARB under a specific authorization to address these emissions, *see* [CHSC] § 43013(b), and the districts under their general air pollution authority.” CARB Reply at 6-7. As the California Supreme Court has repeatedly held, CARB’s views on the proper interpretation of the statutes that it administers is entitled to great weight. *W. Oil & Gas Ass’n v. Monterey Bay Unified Air Pollution Control Dist.*, 49 C. 3d 408, 425 (1989), *quoting W. Oil & Gas Ass’n v. Air Resources Board*, 37 C. 3d 502, 520 (1984).

The “specific authorization” allowing CARB to regulate locomotives is in CHSC § 43013(b), which directs the agency to “adopt standards and regulations” for, *inter alia*, locomotive air emissions. However, that grant of authority by the California legislature did not impliedly preempt the District’s pre-existing authority to regulate non-vehicular sources, including locomotives, as any such preemption must be “specifically provided” in the statute. *See* CHSC § 41508. *See also, W. Oil & Gas Ass’n v. Monterey Bay*, 49 C. 3d at 422 (implied preemption of air district authority can only be found in cases of “undebatable evidence.”). Rule 3502 targets emissions, but it does not establish “standards” for reductions. As explained in Part III, *infra*, regulations limiting extended idling are not “standards” under the law. *Engine Mfrs. Ass’n v. EPA*, 88 F.3d 1075, 1093-1094 (D.C. Cir. 1996). Section 43013(b) deals with a different type of regulation than the Rules here, and the California Legislature cannot be presumed to have repealed by implication the air districts’ authority over such in-use regulations. Manifestly, there is no “undebatable evidence” of such an intent.

The Railroads attempt to rely on CHSC § 40702, which recognizes the air districts' general authority but states that their regulations may not “specify the design of equipment, type of construction, or particular method to be used in reducing the release of air contaminants from railroad locomotives.” The District’s Rules do not specify the design or construction of railroad equipment, or prescribe the method that railroads must employ to reduce emissions, nor do they require that locomotives meet any particular numerical standard. Indeed, railroads are given flexibility to comply in any manner that is feasible; *e.g.*, limit idling, utilize idling control technology, develop equivalency plans, etc. See Rule 3501(d), (f); Rule 3502(c), (d). CARB agrees that CHSC § 40702 is not violated by the District’s “in use” Rule,²⁵ which in fact mirrors the state in-use regulations upheld by the D.C. Circuit as *not* preempted by CAA § 209(e) in *Engine Mfgs. Ass’n*, 88 F. 3d at 1093.

The districts generally do not have authority over motor vehicles (CHSC § 40000), and their powers to regulate sources such as locomotives are limited (CHSC § 40702).²⁶ However, the latter limitations are not overly broad, and specifically address only the “design of equipment, type of construction, or particular method to be used” to reduce emissions from the locomotive. See CHSC § 40702. Significantly, general

²⁵ See CARB Reply at 7 n. 9.

²⁶ Locomotives are not motor vehicles, because they are not devices which move property “upon a highway,” and because they are used “upon stationary rails or tracks.” CAL. VEH. CODE § 670.

limitations on equipment *use* that do not include design or component mandates do not fall within these limits.

Also instructive on the question of the scope of the District's authority is the fact that in creating the District, the California Legislature granted it greater powers and broader jurisdiction than other air districts in the state,²⁷ in recognition of the "critical air pollution problems" afflicting the South Coast Basin. *See* CHSC § 40402(b). CHSC § 40402(b). Pursuant to CHSC § 40440, the District was directed to "adopt and enforce rules and regulations to achieve and maintain the state and federal ambient air quality standards in all areas affected by emission sources" under its jurisdiction, consistent with the Legislature's mandate that "local governments in the South Coast Air Basin must be delegated additional authority from the state in the control of vehicular sources and must retain existing authority to set stringent emission standards for non-vehicular sources." CHSC § 40402(g). The Legislature further provided that "[t]he south coast district board shall adopt revised and updated non-vehicular source emission limitations for inclusion in the state's implementation plan." CHSC § 40443. These particular authorities have not been granted by the California Legislature to any other air quality management district.²⁸ Vigilance by the District and the active promotion of emissions reduction strategies (such as the Rules) to complement the specific authority

²⁷ *See* CHSC §§ 40440-40459.

²⁸ *See* Cal. Leg. Info., <http://leginfo.legislature.ca.gov/faces/codesTOCSelected.xhtml> last visited Feb. 27, 2014.

granted to CARB are squarely within the scope of the District's powers and responsibilities under state law.

The District Court's April 2007 ruling in *AAR v. SCAQMD* included a finding that CHSC § 40702 prevented the District from promulgating in-use locomotive regulations. *See AAR v. SCAQMD* at *6. On appeal, the District demonstrated that this finding was in error, *inter alia*, for the reasons summarized above. The Ninth Circuit never reached this issue, and thus, obviously did not affirm the District Court's conclusion. *Association of American Railroads*, 622 F.3d at 1096 n. 1 (“[w]e assume without deciding that the Rules fall within the District's regulatory authority.”). Under these circumstances, neither the doctrine of *res judicata* nor principles of collateral estoppel preclude the District from contending – and CARB and EPA from concurring – that the District has adequate authority under state law to propose the Rules for inclusion in the California SIP. *Martin v. Henley*, 452 F. 2d 295, 300 (9th Cir. 1971); *Hicks v. Quaker Oats Co.*, 662 F. 2d 1158, 1168 (5th Cir. 1981). Indeed, the Railroads conceded this point in subsequent proceedings in the District Court: “[T]he District is correct that where an alternate ground is not decided on appeal it has no *res judicata* effect....”²⁹

²⁹ *See Ass'n of Am. R.R., BNSF Ry. Co. & Union Pac. R.R. Co.'s Reply to Opposition to Motion for an Order to Show Cause why S. Coast Air Quality Mgmt. Dist. & its Emps. Should not be Held in Civil Contempt or, in the Alt., an Order of Contempt (Doc. 232), Ass'n of Am. R.R. v. S. Coast Air Quality Mgmt. Dist.*, No. CV 06-1416 –JFW, (C.D. Cal. filed Dec. 22, 2011).

For the same reasons, BNSF's argument in this proceeding that the District Court's ruling is "legally binding" and "the law of the case"³⁰ is simply wrong. The latter doctrine has no application in a separate, subsequent proceeding when the trial court ruling in question was presented to but never addressed (much less affirmed) by an appellate court. *United States v. Cote*, 51 F. 3d 178, 181 (9th Cir. 1995), *citing Lucky v. Miller*, 929 F. 2d 618, 621 (11th Cir. 1991). In this case, the Ninth Circuit did not explicitly or implicitly adopt the trial court's finding on the state law issue; to the contrary, the Court of Appeals assumed that the trial court decided the issue incorrectly. The District Court's finding has no binding or precedential effect in this proceeding. *See Fairbrook Leasing Inc. v. Mesaba Aviation, Inc.*, 519 F. 3d 421, 428 (8th Cir. 2008) (no implied affirmation of trial court reasoning).

Equally without merit is the argument advanced by UP that the injunction entered by the District Court in 2007 precludes EPA from including the Rules in the SIP, because the District supposedly "remains barred" from enforcing them. UP Reply at 15-16. Acknowledging (as it must) that the injunction did not bar the District from proposing to CARB that the Rules be submitted to EPA for inclusion in the SIP,³¹ UP

³⁰ BNSF Reply at 20, 22.

³¹ Subsequent to and consistent with the Ninth Circuit's decision in *Association of American Railroads*, the District submitted its Rules to CARB. *See* 622 F. 3d at 1098. UP (and BNSF) protested that this action violated the District Court's injunction, but that court ruled that the Railroads were judicially estopped from advancing such a claim by virtue of their own representations to the Court of Appeals. *See* Order Granting Defendants' Motion to Vacate Order to Show Cause, (Doc. 232), *Ass'n of Am. R.R. v. S.Coast Air Quality Mgmt. Dist.*, No. CV 06-1416 –JFW, (C.D. Cal. filed Feb. 24, 2012) (EPA Petition Exh. B).

nevertheless claims that the injunction prevents their adoption and enforcement because it was based on the District Court's finding that the District lacked the requisite authority under state law. UP Reply at 15. This is incorrect as a matter of record.

The District Court's injunction was based squarely on the conclusion that the Rules were preempted by the ICCTA. *See AAR v. SCAQMD* at * 8 ("The Court concludes that the Rules are preempted in their entirety by the ICCTA as alleged in Plaintiffs' First Claim for Relief. Accordingly, the Court also concludes that Plaintiffs are entitled to a permanent injunction against enforcement of the Rules by Defendants."). At most, the District Court's discussion of state law amounts to an alternative ground of decision, which the Ninth Circuit actually presumed was incorrect.³² In upholding this ruling, the Ninth Circuit limited its holding to a finding that the ICCTA preempted the Rules because as of that time, they only had the "force and effect of state law," and thus did not qualify for the harmonization analysis applicable to federal enactments. *Association of American Railroads*, 622 F.3d at 1098. However, the Ninth Circuit also stated that "to the extent that state and local agencies promulgate EPA-approved statewide plans under federal environmental laws...ICCTA generally does not preempt those regulations because it is possible to harmonize ICCTA with those federally recognized regulations." *See id.* As components of the California SIP – and thus constituting federal law as well as District Rules – Rules 3501 and 3502 can be harmonized with the ICCTA. Once the Rules are approved into the SIP, the basis for the

³² As demonstrated herein, the Rules are authorized under state law.

District Court's injunction no longer will lie, and upon petition at the appropriate time, that court should vacate it. *See, e.g., Am. Petroleum Inst.*, 710 F. Supp. at 433. The District Court's injunction does not prevent EPA from adopting the Rules into the SIP.

As noted *supra*, the scope of the District's authority under California law to enforce the Rules as part of the SIP is not properly before the Board in this proceeding. To the extent that the Railroads' preemption position is based on the argument that the District lacks such authority, however, that argument is without merit.

B. The District's Proposed Rules Address Shortcomings In the 2005 CARB MOU

The Railroads³³ tout steps that they have taken in recent years to reduce locomotive emissions in Southern California – including in particular a 2005 Memorandum of Understanding (MOU) entered into with CARB – in an apparent effort to downplay the importance of Rules 3501 and 3502 to the achievement of the goals of the California SIP. As with the issue of the District's legal authority to propose and enforce the Rules as part of the SIP, the extent to which they would advance the cause of cleaner air in Southern California and comport with the policies of the CAA are not matters properly before the Board in this proceeding. Indeed, the District submits that CARB's recommendation of the Rules to EPA and the latter's inquiry regarding their harmonization with the ICCTA should be dispositive on those questions. The Board should take as established that the Rules are valid under California law and otherwise

³³ *See* AAR Reply at 1-2; BNSF Reply at 7-9; UP Reply at 11-12.

appropriate for inclusion in the SIP.³⁴ The realities of the Railroads' actions under the 2005 MOU, however, also confirm the need for additional action in the South Coast Region.

As explained in the Verified Statement of Moshen Nazemi filed with the District's February 14 Reply, the MOU's requirements that "non-essential" idling by locomotives not equipped with control devices be limited to 60 minutes, and the vague standard of "best efforts" to limit unnecessary idling, created loopholes that have allowed excessive and toxic PM and NOx emissions to persist. *See* District Reply, Nazemi V.S. at 6-9. To the same effect were complaints and testimony submitted by residents directly impacted by the idling of unattended locomotives, as presented in the Reply of the East Yard Communities for Environmental Justice to EPA's Petition. Further, before the District Court in November-December 2006 the Railroads' own witnesses testified that they made *no changes* in their operating practices in order to comply with the MOU's idling provisions.³⁵ The evidence does not support either the claim that the 2005 MOU produced sufficient reductions in idling-related emissions, or that it led to positive (for the environment) changes in railroad idling practices.

³⁴ *See* EPA Comments, at 1-2.

³⁵ *See* Reporter's Transcript on Appeal, *Ass'n of American Railroads v. South Coast Air Quality Management District*, No. CV 06-01416-JFW, 2007 WL 2439499 (C.D. Cal. Nov. 28-30, 2006) ("Trial Tr.") at 309-10 (BNSF witness Roberts) and 637 (UP Witness Brazytis) (Official Notice Tab, Exh. 4). BNSF's witness Stehly also acknowledged that the anti-idling devices called for by the MOU reduced BNSF's switch locomotive fuel costs by about 10%, making it likely that the carrier would have retrofitted the units even in the absence of any MOU requirement. *Id.* at 52, 77 (Official Notice Tab, Exh. 4).

Data assembled by CARB³⁶ likewise indicates that railroad assertions of dramatic progress on idling emissions under the 2005 MOU are overstated significantly. For example, CARB Railroad Inspection Summaries published from 2006-2010³⁷ provide data on idling by locomotive, by railyard. The data includes the date, the locomotive identifier, whether the unit was idling, and if it was issued a Notice of Violation (NOV) for idling in violation of the 2005 MOU. These inspection reports show that on average over the five-year time period studied, at a number of railyards in California there was a high rate of non-compliance with the 2005 MOU on a consistent basis. A total of ten (10) railyards had an average non-compliance rate for idling limits that exceeded 15%. Of these ten (10) railyards, six (6) are within the boundaries of the District.

³⁶ CARB supports the District on the questions of ICCTA preemption and the enforceability of Rules 3501 and 3502 as components of the California SIP. *See* CARB Reply at 2-3, 7-12.

³⁷ *See* Cal. Env't Prot. Agency, Air Res. Bd., *Railyard Inspection Summary*, (2006-2010), <http://www.arb.ca.gov/railyard/ryagreement/ryagreement.htm> (see reports listed under "Railyard Inspection Reports"). *See also* Cal. Env't Prot. Agency, Air Res. Bd., *Carb/Enforcement Program 2006-2010 Inspection Data*, (2010), http://www.arb.ca.gov/railyard/ryagreement/2006_2010_Inspection_data.pdf.

Railyards with Average Non-Compliance Rate > 15%¹						
Location	Non-Compliance Rate %					
	2006	2007	2008	2009	2010	Average
California Railyards Outside the District						
BNSF Richmond	27.1	50.0	35.6	18.3	0.0	26.2
UP Martinez	n/a	100.0	0.0	0.0	nd	33.3
UP Milpitas	0.0	75.0	n/a	0.0	0.0	18.8
UP Roseville	3.6	49.7	6.5	52.3	0.0	22.4
Railyards within SCAQMD Jurisdiction						
BNSF Commerce Eastern	25.0	100.0	27.7	0.0	11.8	32.9
BNSF LAXT ²	nd	nd	nd	nd	100.0	100.0
BNSF Pico Rivera	66.7	100.0	0.0	nd	nd	55.6
BNSF San Bernardino	5.6	100.0	5.6	0.0	0.0	22.2
BNSF Watson (Wilmington)	0.0	75.0	0.0	0.0	7.1	16.4
UP Colton	15.4	50.0	0.0	0.0	28.6	18.8

¹ Non-Compliance rate percentage = [Idling Violations (NOVs)/Idling Trains] x 100. Non-Compliance rate was calculated for each inspection and then averaged to provide annual rates. Most sites were inspected biannually, but there were a few instances where sites were inspected three times per year.

² Non-Compliance data for BNSF LAXT includes two separate inspections in 2010.

n/a = no trains were reported idling

nd = no data was reported

The foregoing table is conservative, because the non-compliance rate does not include warnings of non-compliance or “notices to comply,” which are recorded as part of CARB’s inspection reports but do not identify the type of violation. Only actual idling violations are included, which effectively under-represents the frequency with which idling emissions exceeded the 2005 MOU standards. The persistence of the Railroads’ failure to meet voluntary limitations is clear, however, and points up need for further action in California. The inspection report data also corroborates the testimony by residents that the 2005 MOU has not prompted a reduction in locomotive idling emissions sufficient to meet the Southern California clean air standards.

An in-depth report on “best practices” for railroads to improve energy efficiency released by the U.S. Department of Transportation earlier this year counted fuel savings from locomotive idling reductions among the principal strategies employed by major freight and passenger railroads.³⁸ Idling reduction measures are employed voluntarily by the Railroads to lower costs and increase margins, and include operational adjustments and equipment upgrades that parallel both Rule 3502’s idle limits and the “safe harbor” offered by the Rules for the installation of anti-idling devices. *See* DOT Report at 42, 50. Incentives for engineers to reduce idling (which BNSF reported as saving 5 gallons of fuel per hour) include gift cards. *Id.* at 50. Obviously, the Railroads can and do limit locomotive idling using various techniques, when they determine that it is their economic self-interest to do so. The contradiction between this rational behavior and their claims that the Rules will unreasonably burden interstate commerce is addressed *infra*. From the perspective of the need for the Rules as a matter of air quality policy, however, the record shows that they fill the gap between the Railroads’ economic self-interests and the public interest in healthy air.

³⁸ *See* USDOT & FRA, *Best Practices and Strategies for Improving Rail Energy Efficiency*, No. DOT/FRA/ORD-14/02 12, 21-22, 34, 41-42 (Jan. 2014), <http://ntl.bts.gov/lib/51000/51000/51097/DOT-VNTSC-FRA-13-02.pdf> (“DOT Report”).

**III. The Proposed SIP Rules are Consistent With
The CAA and The Locomotive Inspection Act**

A. The Clean Air Act

In their Replies to EPA’s Petition, the Railroads assert that EPA cannot incorporate Rules 3501 and 3502 into the California SIP because they allegedly are preempted by EPA’s own authority to regulate locomotive emissions standards under Section 209(e) of the CAA (42 U.S.C. § 7543(e)).³⁹ As with so many other arguments that the Railroads have thrown up in response to the Petition, the issue raised is outside the scope of the Board’s jurisdiction in this proceeding. Since EPA has asked only whether the SIP modification would offend the ICCTA and the Board’s declaratory order authority is so limited, it should be assumed that there is no conflict between the Rules and the CAA. As with those other extra-jurisdictional claims, however, the Railroads’ arguments also are without merit.

Section 213(a)(5) of the CAA (42 U.S.C. § 7547(a)(5)) vests EPA with authority to “promulgate regulations containing standards applicable to emissions from new locomotives and new engines used in locomotives.” Pursuant to this authority, EPA established rules requiring the installation of idling control devices on locomotives that were newly manufactured or remanufactured subsequent to July, 2008. *See* AAR Reply at 24. Addressing the limits of its authority under CAA § 213, EPA also observed that except for its rule requiring anti-idling devices on new locomotives, “the Clean Air Act provisions do not appear to provide EPA with particular authority to prevent railroads

³⁹ *See* AAR Reply at 7, 22-23; BNSF Reply at 13-14; UP Reply at 6-8.

from allowing [locomotives] to idle.” *Id.* (citing EPA Idling Fact Sheet at 2). From this, the Railroads leap to the conclusion that since Congress did not give power to limit locomotive idling through regulation to EPA, it must be presumed to have intended that states and agencies such as the District could not exercise such authority either. *Id.* No authority is cited for this proposition, and the implication of the Railroads’ argument is that the issue has not yet been addressed by a court. This is incorrect.

EPA’s authority over locomotives is set forth specifically in Section 213(a)(5) of the CAA (42 U.S.C. § 7547(a)(5)), which charges EPA to “promulgate regulations concerning standards applicable to new locomotives and new engines used in locomotives.” Nothing in this statute gives EPA the authority to regulate the method of operation of locomotives, which is not a “standard,” as discussed *infra*. In contrast, states retain all power to regulate air pollution sources unless it is specifically removed by the CAA (or another statute). This is made clear by CAA Section 116 (42 U.S.C. § 7416), which provides that “except as otherwise provided in... [listed sections]...nothing in this chapter shall preclude or deny the right of any State or political subdivision thereof to adopt or enforce (1) any standard or limitation respecting emissions of air pollutants, or (2) any requirement respecting control or abatement of air pollution...”.

One of the listed provisions in Section 116, *supra*, is CAA § 209(e)(1), (42 U.S.C. § 7543(e)), which is the source of restrictions on state authority over locomotives under the Clean Air Act. It provides for the preemption of any attempt by a “State or any political subdivision thereof...to enforce any standard or other requirement related to the control of emissions from...new nonroad engines or nonroad vehicles,”

which include locomotives. In final rules adopted by EPA for the administration of CAA §§ 209(e) and 213, the agency concluded that the statute *does* allow state and local agencies to set limits on nonroad engine use or operation. On review, this conclusion was affirmed by the D.C. Circuit, which held that under established precedents, regulations limiting nonroad engine *use* were neither “standards” nor “other requirements” for purposes of Section 209(e). *Engine Mfrs. Ass’n.*, 88 F.3d at 1093-1094. *See also, Motor & Equip. Mfrs. Ass’n Inc. v. EPA*, 627 F. 2d 1095, 112-13 (D. C. Cir. 1979) (in-use regulations are not “standards” under the CAA). The court noted that valid local regulations might include “programs to control extended idling,” which are “expressly intended to control emissions.”⁴⁰ The AAR suggests that the portion of the D.C. Circuit’s opinion in *Engine Mfrs. Ass’n.* that addresses CAA §209(e) can be ignored as *dicta*,⁴¹ but that characterization cannot be squared with the plain text of the decision, which rejected the challenge to EPA’s determination that state and local governments can adopt in-use regulations. The Court of Appeals’ decision expressly relied on EPA’s approved construction of §209(e) to dispose of the petitions for review:

⁴⁰ *Engine Mfrs. Ass’n.* 88 F.3d at 1094. To the extent that the U.S. Supreme Court subsequently opined on the issue of “standards” under the preemption provisions of CAA § 209, it has limited them to requirements applicable to the “emission characteristics of a vehicle or engine. To meet them the vehicle or engine must not emit more than a certain amount of a given pollutant, must be equipped with a certain type of pollution-control device, or must have some other design feature related to the control of emissions.” *Engine Mfrs. Ass’n. v. S. Coast Air Quality Mgt. Dist.*, 541 U.S. 246, 253 (2004). The District Rules being considered by EPA do not require any design feature; they merely limit idling of unattended or delayed locomotives.

⁴¹ AAR Reply at 22, n. 15.

The preemptive language of § 209(e) is broad, but it does not speak directly to the question [of State in-use regulation] at hand. ... We therefore defer to the EPA's interpretation under *Chevron*. Accordingly, we grant the EMA petitions insofar as they challenge the limitation of the implied § 209(e)(2) preemption to new nonroad sources, and otherwise deny them.

Id. at 1094.

Under the CAA, emission regulations with respect to mobile sources are divided into two separate but complementary programs. For locomotives and other non-road sources, EPA sets “standards;” that is, rules regarding the emissions characteristics of the engine itself, mandatory pollution control devices, or design specifications. *See* 42 U.S.C. § 7547.⁴² States generally are preempted from setting such standards, but as shown above, they *are* permitted to establish regulations limiting idling. The fact that the CAA did not give EPA the authority to impose idling limits on existing engines does not mean that Congress stripped the states of their pre-existing authority to regulate idling. In the instant case, the District Rules proposed by CARB to EPA are an exercise of state and local agencies’ reserved authority under the CAA, as construed by EPA and upheld by the courts.

⁴² Additionally, except for new locomotives, EPA may authorize California to adopt “standards” for motor vehicles or nonroad engines upon making specific findings. 42 U.S.C. §§ 7543(b), 7543(e)(2)(A). This is generally referred to as the “waiver” provision, because under these sections EPA “waives” its preemptive authority. The Railroads all note that no such waiver was sought by CARB or the District with respect to the Rules. AAR Reply at 22; UP Reply at 7; BNSF Reply at 13 n. 4. However, their observations are irrelevant, because no waiver is required for regulations related to use, such as idling limits, as they are not “standards” or “other requirements” under CAA § 209(e). *Engine Mfrs. Ass’n.*, 88 F.3d at 1093-1094.

B. The Locomotive Inspection Act

UP's Reply includes an argument that the Rules are preempted by the Locomotive Inspection Act ("LIA"),⁴³ yet another statutory assertion that is beyond the scope of this proceeding. UP Reply at 5-6. Purporting to interpret the Supreme Court's 2012 decision in *Kurns v. R.R. Friction Prods. Corp.*,⁴⁴ UP claims that LIA preemption now extends to any standard or agency action that "relates to the 'subject of locomotive equipment.'"⁴⁵ UP has misconstrued *Kurns*, which has no application to Rules 3501 and 3502.

More than twenty (20) years ago, the Ninth Circuit held that the LIA regulates "the 'design, the construction and the material' of every part of the locomotive, but does not mention the *use* of locomotive parts." *S. Pac. Transp. Co. v. Pub. Util. Comm.*, 9 F.3d 807, 811 (9th Cir. 1993) (emphasis in original). Accordingly, the court held that the LIA did not preempt an Oregon statute allowing the state Public Utilities Commission to regulate the use of train whistles (including air horns and other audible warning devices). *Id.*, 9 F.3d at 809 n. 3. Relying on the Supreme Court's 1926 decision in *Napier v. Atl. Coast Line R.R. Co.*,⁴⁶ the Ninth Circuit explained that "[b]ecause the Oregon law neither limits nor expands the type of equipment with which locomotives are

⁴³ 49 U.S.C. § 20701 *et seq.*

⁴⁴ *Kurns v. R.R. Friction Prods. Corp.*, 132 S. Ct. 1261 (2012). *See also* BNSF Reply at 18 (quoting and citing *Kurns*, 132 S. Ct. 1267-68).

⁴⁵ *See* UP Reply at 6.

⁴⁶ *Napier v. Atl. Coast Line R.R. Co.*, 272 U.S. 605, 611 (1926).

required to be equipped, it neither interferes with the goals of the [LIA] nor substantially interferes with its operation.” *S. Pac. Transp. Co.*, 9 F.3d at 811.

In *Kurns*, the Supreme Court reaffirmed and applied *Napier*, but did not even mention – much less overrule⁴⁷ – the distinction drawn clearly in *S. Pac. Transp. Co.* between state regulations respecting the “design, the construction, and the material” of locomotives, which the LIA preempts, and rules concerning the *use* of locomotives, which the Ninth Circuit held are outside its scope. The reason is readily apparent when the actual subject matter of *Kurns* is considered. At issue there were common law tort claims for defective locomotive designs, and a “failure to warn” of a dangerous condition, which also presupposes a defective design. *See* 132 S. Ct. at 1268. The claims related directly to the “design, the construction, and the material” of the locomotives,⁴⁸ and thus fell under the preemptive rubric of the LIA. *See id.* Rules 3501 and 3502, in contrast, relate solely to *use*; the LIA is not implicated.⁴⁹

A proper reading of *Kurns* also dispenses with the Railroads’ attack on their own straw man: the suggestion that the Rules actually compel the installation of anti-idling devices on their locomotives (which they then assert is preempted by various statutes).⁵⁰ In fact, the Rules do no such thing.

⁴⁷ The Supreme Court “does not normally overturn, or so dramatically limit earlier authority, *sub silentio*.” *Shalala v. Ill. Council on Long Term Care*, 529 U.S. 1, 18 (1996).

⁴⁸ *Napier*, 272 U.S. at 611.

⁴⁹ *S. Pac. Transp. Co.*, 9 F.3d at 811.

⁵⁰ *See, e.g.*, AAR Reply at 9; UP Reply at 2.

The Board is quite familiar with the very real and substantive distinction between a mandate to perform an act or alter equipment, on the one hand, and a “safe harbor” that offers immunity from application of an alternative use or performance standard, on the other. The Board’s own recent decision addressing BNSF’s (and UP’s) general tariff rules regarding control of fugitive coal dust is a case in point.⁵¹ EPA likewise has distinguished between requirements for anti-idling devices, which are preempted unless a waiver is obtained from EPA, and limitations on engine idling, such as requiring a shutdown of an engine after a defined time period, which are not preempted. For example, in acting recently on CARB’s truck rules, EPA stated: “EPA agrees with [CARB’s] analysis and *does not believe that in-use controls, such as idling limits, are preempted* by Section 209(a).”⁵² Idling limits for locomotives are no different, where they do not dictate how a manufacturer must design new engines.

In *Kurns*, the petitioners sought to argue that because their claim for “failure to warn” was not formally directed at the design of the locomotives *per se*, LIA preemption could be avoided. *See* 132 S. Ct. at 1267-68. However, the Court found that as a practical matter, the only way for the manufacturer to avoid liability was to change the design to remedy the “defect” that allegedly had required a warning. 132 S. Ct. at 1268 n. 4. In the instant case, compliance with the Rules can be achieved easily without

⁵¹ *Reasonableness of BNSF Ry. Co. Coal Dust Mitigation Tariff Provisions*, STB F.D. No. 35557 (STB served December 17, 2013).

⁵² Cal. State Motor Vehicle and Nonroad Engine Pollution Control Standards; Truck Idling Requirements, 77 Fed. Reg. 9,239, 9,245 (February 16, 2012) (Notice of Decision) (emphasis added).

making any changes to the locomotives' design: all that is required is a limitation on unattended *use*. More analogous here is the Supreme Court's disposition of *Ray v. Atlantic Richfield Co.*,⁵³ in which the Court made clear that where a state had in place a valid tug escort requirement – which did not affect ship design – it could offer the ship owner an option of using double-hulled ships and avoiding the escort rule without triggering the Ports & Waterways Safety Act's preemption of ship design requirements. The Court explained: "Given the validity of a general rule prescribing tug escorts for all tankers, [the State of] Washington is also privileged, insofar as the Supremacy Clause is concerned, to waive the rule for tankers having specified design characteristics." 435 U.S. at 173.

Rule 3502 operates in the same way. Its basic requirement is a 30-minute idling limit applicable in certain circumstances, which is not preempted by the Clean Air Act. *Engine Mfrs. Ass'n.*, 88 F.3d at 1094. The Rule therefore may *exempt* from its idling limits a locomotive that meets specified requirements (*e.g.* having an anti-idling device). The fact that both provisions are intended to reduce air pollution does not change this result; in *Ray*, both provisions were intended to enhance safety and prevent marine pollution due to spills. *See* 435 U.S. at 169, 171.

Finally, in discussing preemption under the CAA, EPA has noted that because of the Class I railroads' market power over locomotive sales, manufacturers must

⁵³ *Ray v. Atl. Richfield Co.*, 435 U.S. 151 (1978).

be very responsive to changes in design requested by the carriers.⁵⁴ For that reason, EPA decided that state regulation would be preempted if it “would be expected to affect how a manufacturer designs a new locomotive or new locomotive engine....”⁵⁵ However, in this case the Rules could not have any effect on how a manufacturer designs its locomotives. By the time the Rules were proposed in 2006, all new line-haul locomotives already were being built with anti-idling devices. *See* District Reply, Nazemi V.S., Exh. 4 at 2. The Rules cannot be the motivation for the Railroads’ efforts to retrofit switch locomotives with anti-idling devices either, because the Railroads already agreed in the 2005 MOU to have more than 99% of their in-state (California) locomotives retrofitted by 2008. *Id.* It is clear from the record that the Railroads’ claims that the Rules force the installation of anti-idling devices (and therefore are preempted) have no basis in fact.

IV. The Proposed SIP Rules are Not Preempted by the ICCTA

As established in the District’s Reply and summarized earlier in these Supplemental Comments, the proper legal standard for evaluating Rules 3501 and 3502 as part of the California SIP is whether they can be enforced in harmony with the ICCTA, *not* whether as “local rules” impacting railroads, they should be preempted under 49

⁵⁴ Emission Standards for Locomotives and Locomotive Engines, 62 Fed. Reg. 6,366, 6,397 col. 1(Feb. 11, 1997).

⁵⁵ *Id.* *See also*, Emission Standards for Locomotives and Locomotive Engines, 63 Fed. Reg. 18,978, 18,994 (Apr. 16,1998).

U.S.C. § 10501.⁵⁶ The Railroads argue that inclusion of the Rules in the SIP should make no difference in terms of the legal analysis,⁵⁷ and they assert as guiding precedents previous Board decisions addressing state and local regulations affecting railroads from the perspective of standard preemption theory.⁵⁸ The Railroads are wrong.

The Ninth Circuit's decision in *Association of American Railroads* makes clear that once the Rules are considered as part of the SIP, they are *federal* enactments that qualify for a harmonization analysis, as distinguished from local regulations that are not entitled to such deference. *See* 622 F.3d at 1098. The distinction was acknowledged by the District Court as well; after finding (incorrectly) that only CARB could act on locomotive idling rules under the CAA, the court opined that “[a]s a result...the Court need not ‘harmonize’ or reconcile the preemptive effect of the ICCTA with the mandates of the CAA.” *AAR v. SCAQMD* at *6. The Board likewise has affirmed that state or local actions under the auspices of federal environmental laws carry a stronger presumption of consistency with the ICCTA, and that railroad efforts to avoid enforcement based on the ICCTA are subject to a stricter standard:

⁵⁶ *See* District Reply at 13-19; pp. 3-5, *supra*.

⁵⁷ *See* AAR Reply at 12, 18; UP Reply at 3, 14; BNSF Reply at 16.

⁵⁸ *See, e.g.*, BNSF Reply at 16-17, 23; AAR Reply at 14, n. 7.

[T]he Board has concluded that nothing in section 10501(b) is intended to interfere with the role of state and local agencies in implementing Federal environmental statutes such as the Clean Air Act, the Clean Water Act, and the Safe Drinking Water Act, unless the regulation is being applied in such a manner as to unduly restrict the railroad from conducting its operations or unreasonably burden interstate commerce.

Friends of the Aquifer, STB F.D. No. 33966 (STB served August 15, 2001) at 5-6. *See also, Cities of Auburn and Kent, WA – Petition for Declaratory Order – Burlington N. R.R. Co. – Stampede Pass Line*, 2 S.T.B. 330, 337 (1997) (“Rather than relegating state and local agencies to the periphery in implementing Federal law, the statutory scheme gives individual states the responsibility of developing and enforcing air quality programs...within their borders.”).

Rules 3501 and 3502 neither directly regulate rail operations, nor discriminate against railroads vis-à-vis other emitters of PM and NOx. As such, they can be enforced in harmony with the ICCTA as part of the California SIP. *See Grafton* at 6.⁵⁹

⁵⁹ *See also United States v. St. Mary's Railway West, LLC*, 2013 WL 6798560*3 (S.D. Ga. 2013) (Section 10501(b) “displaces only those laws that have the effect of managing or governing rail transportation, while permitting the continued application of laws having a more remote or incidental effect on rail transportation.”) (Internal quotation marks omitted).

**A. Rules 3501 and 3502 Do Not Directly
Regulate Railroad Transportation**

As the District established in its Reply, when the ICCTA must be accommodated with another federal statute, there is a strong presumption that both are to be given effect.⁶⁰ Application of that rule here requires that the Board limit its inquiry to whether Rules 3501 and 3502 intrude on matters “that are *directly regulated* by the Board (e.g., rail carrier rates, services, construction, and abandonment).” *See Grafton* at 4 (emphasis added). *See also*, District Reply at 13-19 (and authorities cited therein); *Cities of Auburn and Kent, WA*, 2 S.T.B. at 338-39. The Rules do not purport to control the Railroads’ rates or routing decisions, require pre-approval of new construction or abandonments, or direct the provision of transportation service itself. As part of the California SIP, the Rules’ principal focus and effect is enforcement of a core purpose of the CAA: reducing dangerous air emissions within a NAAQS non-attainment area. That this may have some impact on the Railroads’ locomotive idling preferences under certain circumstances “is in no way a direct regulation on [the Railroads’] activities.” *United States v. St. Mary’s Railway West, LLC*, at *4.⁶¹ As the courts have confirmed, if a rule implements a core provision of one federal statute while only marginally impacting another, full effect must be given to the core purpose of the first statute. *N.Y.*

⁶⁰ *See, e.g., Nat’l. Ass’n. of Home Builders*, 551 U.S. at 662; *Massachusetts v. EPA*, 549 U.S. 497, 532 (2007).

⁶¹ *See also, Engine Mfrs. Ass’n*, 88 F.3d at 1094 (in-use regulation of vehicle idling by states was not precluded by the statutory delegation of authority to set emissions standards and requirements to EPA).

Susquehanna & W. Ry. Corp. v. Jackson, 500 F.3d 238, 252 (3rd Cir. 2007). *See also*, *Tyrell v. Norfolk S. Ry. Co.*, 248 F.3d 517, 522-23 (6th Cir. 2001).

Ignoring the Ninth Circuit’s clarification of the applicable law regarding the Rules, the Railroads argue that portions of a report issued by CARB in 2005 should be probative on the question whether the Rules as proposed for inclusion in the SIP in 2014 should be found preempted. *See* UP Reply at 12, 19-20. There is no merit to this position. In 2005, CARB was addressing a proposed rule *different* from those proposed by EPA for inclusion in the SIP in 2014, so even in the absence of intervening authority, the Railroads’ reference misses the mark.⁶² However, the clearest rebuttal to the Railroads’ point is CARB’s own Reply to the EPA Petition in this proceeding, which fully supports the District and – relying on *Association of American Railroads*⁶³ – argues that the Rules should be harmonized with the ICCTA and upheld:

⁶² The report, a copy of which appears as Exhibit 15 to BNSF’s Reply, addressed the question whether CARB could or should attempt to promulgate the provisions of the 2005 MOU in the form of binding regulations. *Inter alia*, those provisions included mandates for the installation of idling control devices, and mandatory health risk assessments at railroad yards that could trigger specific mitigation measures (BNSF Reply Exh. 15 at 1-2), neither of which are elements of Rule 3501 or Rule 3502.

⁶³ CARB Reply at 9 (citing *Association of American Railroads*, 622 F.3d at 1098 (“Now that South Coast has followed the Court’s directions and submitted its plans for approval, the matter should be settled against preemption.”)).

Neither the STB nor any federal court has ever held a federal environmental action to be preempted by the ICCTA. Instead, the STB has made clear that the railroads continue to be responsible for compliance with environmental laws, including regulatory measures required for state implementation plans under the Clean Air Act. This interpretation harmonizes the mandates of the two federal statutes, ensuring that states and local jurisdictions can protect the health of their citizens while the STB continues its important work. The STB should maintain this long-standing approach in this matter. South Coast's two locomotive idling rules were developed to meet its Clean Air Act obligations and, if approved by EPA, will become federal law. As such, they fall squarely within the STB's long-standing precedent, and would not be preempted if approved.

CARB Reply at 1-2.

The Railroads' position in this proceeding appears to be that any rule that has a perceived impact on their operational preferences should be preempted, even if that rule implements federal law and mirrors actions that the Railroads themselves will take *voluntarily* when their own interests are served. The law is otherwise, especially when the federal law in question is the CAA or other environmental statute. *Association of American Railroads*, 622 F.3d at 1098; *Bos. & Me. Corp.*, 5 S.T.B. at 508. The Rules at issue here are "attenuated and peripheral" to the direct regulatory purposes of the ICCTA,⁶⁴ while they serve core goals of the CAA. Therefore, they cannot be deemed preempted. See *New England Transrail, LLC – Constr., Acquisition and Operation Exemption – In Wilmington and Woburn, MA*, 2007 STB Lexis 391, at *19 (June 29,

⁶⁴ *Merrill Lynch v. Ware*, 414 U.S. 117, 131-36 (1973).

2007) (“[w]here there are overlapping Federal Statutes, they are to be harmonized, with each statute given effect to the extent possible”).

B. Rules 3501 and 3502 Do Not Unreasonably Interfere With Interstate Commerce or Unreasonably Burden Railroad Operations

As the District’s witnesses Nakamura and Reistrup established previously, compliance with the reporting requirements in Rule 3501 will have only a minimal impact on railroad crew procedures, and imposes no burden whatsoever on interstate commerce.⁶⁵ The limited information required to be reported⁶⁶ already is collected and stored automatically by on-board locomotive event recorders, and the Rule allows considerable flexibility in terms of who actually records and reports the information, and when the task must be performed.⁶⁷ As noted by Witness Reistrup, the reporting process described in Rule 3501 is less rigorous than both the Railroads’ own internal recordkeeping, and the requirements imposed by FRA regulations. District Reply, Reistrup V.S., p. 3, 7-8.

District witnesses Thomas E. Johnson, P.E. and Richard C. Beall, whose joint Verified Statement is submitted with these Supplemental Comments, together have more than 70 years of experience with the design and operation of railroad locomotives,

⁶⁵ See District Reply, Nakamura V.S., p. 8-11, Reistrup V.S., p. 5-8.

⁶⁶ The reporting Rule was developed with input from the Railroads, and the scope of the information to be required was pared down during the development process, specifically in response to concerns expressed by the Railroads’ representatives. District Reply, Nakamura V.S., p. 10.

⁶⁷ *Id.*, p. 11-12.

including Automatic Engine Start/Stop (“AESS”) equipment which is now in service on more than 95% of the locomotives used in the South Coast Air Basin.⁶⁸ Expanding upon Mr. Reistrup’s prior testimony, Messrs. Johnson and Beall explain in detail the steps that the Railroads’ crews would take to comply with Rule 3502, under a variety of locomotive configuration scenarios. Confirming Mr. Reistrup’s earlier opinion,⁶⁹ they also demonstrate how compliance would not be unduly burdensome either to the Railroads’ operations or interstate commerce.

In a nutshell, Messrs. Johnson and Beall show that with reasonable crew management practices, a train which is held unattended under circumstances where Rule 3502 would apply should be ready for subsequent movement after compliance with the Rule at the same time as it would have been had it been left idling. *Johnson/Beall V.S.*, p.5-8. For the vast majority of locomotives that are AESS-equipped, the stop/start sequences involved in compliance would take only minutes to execute,⁷⁰ and for the units that are not so equipped, time needed for the necessary steps should be built into the crew’s pre-departure orders.⁷¹ For the relatively few trains in a distributed power configuration that might be held unattended in a yard for more than 30 minutes,⁷² Messrs.

⁶⁸ *Johnson/Beall V.S.*, p. 7.

⁶⁹ District Reply, *Reistrup V.S.*, p. 8-12.

⁷⁰ *Johnson/Beall V.S.*, p. 9-13.

⁷¹ *Id.*, p. 4-6.

⁷² *Id.*, p. 15.

Johnson and Beall explain how hostlers and other available yard personnel would prevent or drastically minimize any delays.⁷³ Indeed, the experts show that if a train subject to Rule 3502 is delayed in departing a yard or reaching its next scheduled station, the cause most likely would be whatever prompted the carrier to hold the train unattended in the first place, not the carriers' compliance with Rule 3502.⁷⁴ Like its reporting counterpart, Rule 3502 does not impose an undue burden on railroad operations, and compliance with its limited restrictions will not interfere with interstate commerce.

The Railroads⁷⁵ reference a September 27, 2013 letter signed by FRA Administrator Joseph Szabo and addressed to EPA as supposed evidence of FRA "safety concerns" over Rule 3502, which the Railroads imply were raised *sua sponte* by FRA and claim are entitled to "substantial weight" in this proceeding.⁷⁶ However, a review of the letter makes clear that FRA essentially was passing on points raised by AAR, after that organization had "reached out" to FRA and provided various unidentified materials. It is not an objective assessment made after careful agency consideration of the views of all interested parties. It also reflects an incomplete understanding of how the Rules operate, and the manner in which they were developed. This information subsequently was provided by the District to EPA, in a letter dated November 14, 2013 and accompanying

⁷³ *Id.*, p. 16.

⁷⁴ *Id.*, p. 20-21.

⁷⁵ AAR Reply at 27; UP Reply at 10; BNSF Reply at 14. A copy of the letter appears as Exhibit 14 to BNSF's Reply.

⁷⁶ AAR Reply at 27.

Report by Mr. Colon Fulk, an expert with more than 33 years' experience in locomotive operations.⁷⁷

Mr. Fulk explained that contrary to the AAR "concern" advanced by FRA, any differences between the way EPA regulations define "unattended equipment" and the definition of "unattended" used in Rule 3502 would not cause confusion. The latter had been discussed with the Railroads during the development of Rule 3502, and previously was clarified by District staff.⁷⁸ Mr. Fulk further explained that the engine shutdown required by the Rule would have no effect on the train's subsequent operation unless the shutdown exceeded four (4) hours, in which case an air brake test would be required. The District pointed out that the Railroads have never presented evidence of occasions where a locomotive legitimately would be off-air for more than four (4) hours.⁷⁹ Mr. Fulk also explained that restarting a locomotive's engine consumes only a few minutes' time, and he described how the Railroads' own procedures and experience mitigated any risk associate with the manual setting and resetting of train brakes. To the extent that there is any risk at all in this regard, it is due to the train being left unattended, not to its engine being shut down.

That measures to curtail idling of unattended locomotives as required by Rule 3502 do not pose an unreasonable burden on railroad operations is further

⁷⁷ These responsive materials were included in the attachments to EPA's Petition, and for convenience are reproduced in Official Notice Tab, Exhs. 5 & 6.

⁷⁸ See District Reply, Nakamura V.S. at 19.

⁷⁹ It is noteworthy that even in such an event, the engine could be restarted in order to recharge the brakes, and the idling limit no longer would apply.

confirmed by the recent DOT Report referenced *supra*, the Railroads’ own internal procedures, and their voluntary compliance with the 2005 CARB MOU. The ease of compliance with the reporting requirements of Rule 3501, in turn, was established through testimony submitted on the Railroads’ behalf before the District Court in 2006.

The 2014 DOT Report contains numerous, approving references to measures undertaken voluntarily by U.S. freight railroads (including BNSF, UP and NS) to increase fuel efficiency by reducing the incidence and duration of locomotive idling. These include the installation of start-stop and idle control devices;⁸⁰ special training for engineers;⁸¹ and adjustments to operating practices.⁸² AAR also listed these actions in its own white paper as examples of “the most effective strategies” to improve railroad fuel efficiency.⁸³ It is reasonable to assume that the Railroads would not implement these strategies – which are mirrored by Rule 3502’s idle limits and safe harbor – if the expected benefits in fuel cost savings did not outweigh (most likely substantially) any potential inconvenience to railroad operations. The Railroads’ “sky is falling” claims regarding the alleged effects of Rule 3502 on those operations are belied by their own internal practices.⁸⁴

⁸⁰ DOT Report at 12, 23, 34, 42, 62.

⁸¹ *Id.* at 12, 34, 50.

⁸² *Id.* at 23, 50.

⁸³ *Id.* at 34.

⁸⁴ *See* District Reply, *Reistrup V.S.* at 3-4, 8-11.

Likewise, the Railroads' complaints that the safe harbor offered by the Rules if anti-idling devices are in place and set to shut down engines after 15 minutes is unduly burdensome,⁸⁵ is contradicted by their own voluntary undertakings with CARB. Before the Rules initially were adopted by the District, the Railroads had agreed with CARB in the 2005 MOU to set all automatic idling devices that already were, or in the future would be, installed in locomotives servicing California to a 15-minute limit.⁸⁶ Thus, while the Railroads now complain that the Rules' safe harbor for locomotives with idling devices set at 15 minutes conflicts with EPA's rule that devices on new or remanufactured units must be set at 30 minutes, they already had agreed to the 15 minute limit before either the EPA rule or Rules 3501 and 3502 were adopted. Established Board precedent makes clear that the Railroads' agreement to comply with that standard is an admission that it would not interfere with interstate commerce or unduly burden railroad operations. *See Twp. of Woodbridge, N.J. v. Consolidated Rail Corp., Inc.*, 5 S.T.B. 336, 340 (2000).

Finally, in 2006 BNSF and UP's own witnesses before the District Court acknowledged that the information gathering and reporting requirements of Rule 3501 impose no real burdens on their operations. UP's witness Joel Ritter testified that all information required to be gathered regarding idling events either already was recorded

⁸⁵ *See* AAR Reply at 8-9; BNSF Reply at 10-11, 14; UP Reply at 13.

⁸⁶ District Reply, Nazemi V.S., Exh. 4, Sec. C(1)(b). *See also* Trial Tr. at 78, 79 (Official Notice Tab, Exh. 4), where BNSF's trial witness Stehly confirmed that under MOU locomotives were to be installed with anti-idling devices set at 15 minutes.

or could be downloaded from locomotive event recorders.⁸⁷ He further testified that as of 2006, about 90% of UP's locomotives were equipped with recorders, a fact confirmed in this proceeding by the District's witness Reistrup.⁸⁸ UP's witness Douglas Wills further acknowledged that existing crew forms easily could be revised to report the information required by Rule 3501.⁸⁹ He also made that admission in 2006; since that time, the Railroads have had ample opportunity to implement those uncomplicated revisions.

C. Inclusion of the Rules In The SIP Will Not Lead to a "Patchwork" of Local Regulations

The Railroads contend that if Rules 3501 and 3502 are part of the California SIP, it will "open the floodgates" of local regulations, and start the Railroads down a "slippery slope" that could result in a "balkanization of the national rail network."⁹⁰ They argue that "there will be no end to the variety of requirements" and that these localized regulations will "impose undue burdens on the railroads."⁹¹ *See* UP Reply at 4; *see generally* BNSF Reply at 2-4. These claims are completely overblown.

In analogous circumstances, the Supreme Court has rejected Commerce Clause challenges based on naked claims regarding the possibility of differing state requirements: "While appellant argues that other local governments might impose

⁸⁷ Trial Tr. at 601 (Official Notice Tab, Exh. 4).

⁸⁸ *See id.*; District Reply, Reistrup V.S., p. 5-6.

⁸⁹ Trial Tr. at 362 (Official Notice Tab, Exh. 4).

⁹⁰ BNSF Reply at 18; NS Reply at 5-8; UP Reply at 4. *See also*, AAR Reply at 16.

⁹¹ UP Reply at 4; BNSF Reply at 2.

differing requirements as to air pollution, it has pointed to none.... We conclude that no impermissible burden on commerce has been shown.” *Huron Portland Cement Co. v. City of Detroit*, 362 U.S. 440, 448 (1960). *See also, Pacific Merchant Shipping Ass’n v. Goldstene*, 639 F.3d 1154, 1181 (9th Cir. 2011). Courts have applied the same principle in statutory preemption analyses. Speculation about possible future rules does not constitute proof of interference required for a finding of preemption. *Fuller v. Norton*, 86 F.3d 1016, 1026-27 (10th Cir. 1996) (“We are unwilling to preempt...based on speculation....”).

For any proposed rules to be included within a state’s SIP, they first must survive the rulemaking and approval process at the state level, and then be reviewed and accepted by EPA. State procedures (such as those followed by CARB and by the District under CHSC §§ 40725-40728, 40440.5 and 40440.7) afford interested parties ample public notice, opportunity to comment, and – as the Railroads did with Rules 3501 and 3502 – shape the regulations in response to their concerns. While other states obviously are not subject to the CHSC, most have comparable regimes, and at a minimum, EPA’s regulations impose notice-and-comment requirements for any state’s SIP submittal. 40 C.F.R. Part 51.102. EPA then must evaluate and propose action on SIP submittals, in a process that affords additional opportunity for public input (as occurred in the case of Rules 3501 and 3502). If the rules at issue impact railroads in some fashion, in harmonizing any future SIP rule EPA also will weigh the benefits with any potential burden on those railroads, including whether it imposes disparate or conflicting requirements. Thus, for example, an idling limit such as Rule 3502, which is essential to

promoting cleaner air in the NAAQS non-compliant and congested South Coast Air Basin, may not be found to outweigh any associated effects in another region that is not afflicted with those conditions.

Even if other states were to follow the lead of California and propose the adoption of locomotive idling limits as part of their SIPs, it is likely that those rules will be similar, not “patchwork” or “balkanized”. For example, Massachusetts has intervened in this proceeding to protect its interest in enforcing the idling limits in its own approved SIP. *See* 310 CMR 7.11(1). The Massachusetts rule is similar to Rule 3502, as it limits idling to 30 minutes in specified circumstances. Any other state considering such a rule would have a strong incentive to adopt the same standard as the District has promulgated, so as to ensure that the state’s new rules also would be accepted by EPA.

Finally, assuming *arguendo* that EPA ultimately did approve different state idling limits, they still would not “impose severe operating burdens” because the Railroads already have systems in place to comply with local rules and regulations.⁹² Currently, the Railroads contend regularly with local rules governing speed limits, time in front of gates, horn blowing, and idling.⁹³ In order to provide crews with the information necessary to comply with local requirements for a given area, the Railroads publish

⁹² *See* Trial Tr. at 692-94 (testimony of Colon Fulk) (Official Notice Tab, Exh. 4); *see generally id.* at 234. As the D.C. Circuit has noted, regulations that apply to the use of equipment, as opposed to its design, “are inherently local in character, in that their appropriateness depends on local conditions.” *Engine Mfrs. Ass’n.*, 88 F. 3d at 1094, n. 8.

⁹³ Trial Tr. at 692-94 (Fulk) (Official Notice Tab, Exh. 4); *id.* at 105-06 (Stehly).

timetables that serve as reference guides for specific regions, which every conductor is required to carry while on duty.⁹⁴ The Railroads can and regularly do comply with these location-specific requirements.⁹⁵ There is no reason to expect that the task of complying with Rules 3501 and 3502 will be any different or impose any more of a burden on the Railroads.⁹⁶ And as recognized by the Ninth Circuit, use regulations do not pose the risk that railroads may have to “remove or add equipment as they travel from state to state.” *S. Pac. Transp. Co.*, 9 F.3d at 811.

**D. The Rules Are Not Discriminatory
Against the Railroads**

A fair consideration of the record confirms that as *emissions regulations* under the California SIP, Rules 3501 and 3502 would not be discriminatory against railroads.⁹⁷ The fact that these particular provisions apply only to an activity (the idling of locomotives) conducted by railroads properly cannot be the determining factor,⁹⁸

⁹⁴ *See id.* at 693.

⁹⁵ *See id.* at 692-94.

⁹⁶ It bears repeating that the Railroads already are motivated to reduce idling to save on fuel costs, so adhering to the Rules actually will provide an economic benefit. *See* Trial Tr. at 322 (Douglas Wills of UP agrees with statement that UP “wants to conserve fuel by curbing idling.”) (Official Notice Tab, Exh. 4); *see also id.* at 56 (BNSF document states that “60 percent of idling time was avoidable.”).

⁹⁷ *See Grafton* at 6.

⁹⁸ In *dicta*, the Ninth Circuit suggested that under the standard preemption test applicable to state and local regulations, the fact that a proposed rule only applied to railroads could support a finding that it was not a rule of “general applicability” and thus would not pass muster. *Association of American Railroads*, 622 F.3d at 1098. However, the court already had concluded that the decision below would be affirmed on other grounds, and it

because they do not exist in isolation. Rather, they constitute *parts* of a broader California regime presided over by an agency charged with controlling air pollution, not regulating transportation.

As the District demonstrated in its Reply, at the time that the Rules were proposed for inclusion in the SIP, regulations already had been promulgated at the state level to control or limit emissions of PM and NO_x by virtually any industry operating in California whose processes contribute to the state's failure to achieve the NAAQS for these contaminants, including industrial, institutional and commercial boilers, steam generators and process heaters. *See* District Reply, *Nazemi V.S.*, p. 3. These regulations impose recordkeeping and emissions limitation requirements that are more onerous and burdensome than Rules 3501 and 3502, both in terms of frequency of reporting and in the actions mandated to achieve compliance. *Id.* at 3-4; *see also* *Nakamura V.S.*, p. 8-10.⁹⁹ Moreover, Rules 3501 and 3502 only apply when emitting locomotives are functioning as stationary emissions sources; they have no impact whatsoever on in-motion locomotives, whether or not they actually are engaged in transportation. *Id.*, *Nakamura V.S.*, p. 14. The Rules are part of a regime of general application to industries of various types across California, which has as its central purpose the control of emissions of PM and NO_x.

was addressing the Rules specifically as *state* enactments that did not qualify for a harmonization analysis. Its observation has no application to the question whether the Rules can be accommodated to the ICCTA as parts of *federal* law, that “typically are not preempted” and are to be regarded as equally effective vis-à-vis the ICCTA. *Id.*; *Radzanower v. Touche Ross & Co.*, 426 U.S. 148, 155 (1976).

⁹⁹ *Inter alia*, some of these regulations mandate the installation of specific pollution control technology. District Reply, *Nakamura V.S.* at 9-10.

While railroads are included in this regime, they are not singled out for discriminatory treatment or subjected to arbitrary enforcement intended to restrict an activity in which other industries are free to engage. *Compare, Bos. & Me. Corp.*, 5 S.T.B. at 509. Indeed, California already has subjected the Railroads' chief intermodal competitor (motor carriers) to more stringent idling limits. *See* District Reply, *Wallerstein V.S.*, p. 6-8.

Rules 3501 and 3502 effectuate core purposes of the CAA within California,¹⁰⁰ while only grazing the periphery of the ICCTA. *United States v. St. Mary's Ry. W., LLC*, at *4. They can and should be enforced in harmony with the latter statute.

E. The Rules are Limited in Scope

Rules 3501 and 3502 were developed following a procedure in which the Railroads were active participants, and in which their views and concerns translated directly into modifications to reduce the burden of compliance.¹⁰¹ Contrary to the Railroads' hyperbolic warnings of a "grave risk to the rail industry"¹⁰² and "harm [to] the Nation's prosperity,"¹⁰³ the end result was Rules which represent the least drastic (from the standpoint of impact on railroad operations) means to achieve emissions reductions mandated by the CAA.

¹⁰⁰ *See* District Reply at 31-40.

¹⁰¹ *See* District Reply, *Nakamura V.S.* at 3-7.

¹⁰² AAR Reply at 16.

¹⁰³ *Id.* at 26.

Rule 3501 requires no communication between dispatchers or yardmasters and crews that do not already take place in the ordinary course,¹⁰⁴ and as the District has established through its witness Reistrup,¹⁰⁵ the five (5) pieces of information required to be reported are readily available from on-board equipment on virtually all locomotives in the Railroads' fleets. Neither the time at which the information is to be recorded nor who must record it is specified,¹⁰⁶ so the Railroads have complete flexibility to comply in the manner that best fits their individual operational and safety practices.

The AAR, UP and BNSF all claim that Rule 3501 is “burdensome,”¹⁰⁷ but they offer no detailed explanations as to why. Instead, there are vague allusions to some sort of manual reporting procedure, as if crews would be required to stop work, produce pencil and pad, and make extensive notes of information that cannot easily be obtained. *See* BNSF Reply at 11 (“the rules would meaningfully decrease yard crew time per day simply due to the requirements to record locomotive ‘idling events’.”). The reality is otherwise: the locomotives themselves perform the information recording function,¹⁰⁸ and actual reporting can be performed with minimal crew effort and at almost any time that is convenient.¹⁰⁹

¹⁰⁴ District Reply, Nakamura V.S. at p. 10.

¹⁰⁵ District Reply, Reistrup V.S. at 3, 5-7.

¹⁰⁶ District Reply, Nakamura V.S. at 8-9.

¹⁰⁷ AAR Reply at 16; UP Reply at 19; BNSF Reply at 11.

¹⁰⁸ *See supra* note 105.

¹⁰⁹ District Reply, Nakamura V.S. at 9.

The scope of Rule 3502 likewise is limited. Rule 3502 (d)(1) mandates shut-down of a locomotive's *engine only*, if the unit is unattended for more than 30 minutes for one of five (5) specific reasons. Trailing locomotive engines in a consist need only be shut down (the lead engine can continue to idle) in two (2) scenarios, both of which require that the operator specifically be informed that the consist will not move for at least 30 minutes (Rule 3502 (d)(2)). Battery power can remain engaged, thereby maintaining climate controls, on-board communications, radio contact with unmanned units, etc. And as noted *supra*, in the limited number of instances where distributed power configurations may be involved, available yard personnel can assist train crews.¹¹⁰ Moreover, exceptions from even these limited engine shut-down requirements are provided in the event that ambient temperatures are lower than 40 degrees; engine idling is needed to recharge batteries; or an emergency condition arise (Rule 3502 (j)).

As with Rule 3501, the Railroads' alarms over the impact of the engine idling limitations on system operations bear no rational relationship to the selective and limited scope of the actual Rule. For example, allegations of excessive time dedicated to shutting down and restarting engines¹¹¹ are belied by District staff's direct observations of railroad operations and the carriers' own internal procedures.¹¹² Similarly, claims regarding the supposed impact of Rule 3502 on trains utilizing distributed power

¹¹⁰ See Johnson/Beall V.S., p. 16.

¹¹¹ See, e.g., BNSF Reply at 11.

¹¹² District Reply, Nakamura V.S. at 20-21.

configurations¹¹³ ignore the facts that these configurations rarely would be held in yards, and could be assisted by yard personnel should it be necessary. Engine shut-down also leaves battery power available to support radio control of the remote units,¹¹⁴ and is only required when the *entire train* is unattended for more than 30 minutes. *See* District Reply, Nakamura V.S., p. 19. The Railroads' objections are long on rhetoric, but short on relevant facts that actually apply to the limited requirements of Rule 3502.

Before the Rules ever were proposed to CARB for recommendation to EPA as additions to the California SIP, they were considered and debated extensively in proceedings that included the active and substantive participation of the Railroads. As a result of that collaboration, the final Rules developed by the District reflect numerous modifications to earlier proposals that were adopted specifically in response to concerns expressed by BNSF, UP and the AAR.¹¹⁵ Rules 3501 and 3502 as currently before the Board at the request of EPA represent a minimalist approach to addressing persistent contributions by locomotives to violations of federal ambient air quality standards and emissions of carcinogenic diesel particulates.

¹¹³ UP Reply at 23.

¹¹⁴ *See* Johnson/Beall V.S. at ____.

¹¹⁵ District Reply, Nakamura V.S. at 3-7.

REQUEST FOR OFFICIAL NOTICE

As part of this Reply, the District respectfully requests that the Board take Official Notice of the following accompanying items:

1. Press Release, DOJ, Mass. Bay Transp. Auth. To Spend Millions to Reduce Commuter Train Emissions in Clean Air Act Settlement (Aug. 4, 2010), obtained from <http://www.justice.gov/opa/pr/2010/August/10-enrd-896.html>.
2. U.S. EPA, *Clean Air Act Settlement with the Mass. Bay Transp. Auth. (MBTA) & Mass. Bay Commuter R.R. Co. (MBCR) for Commuter Train Idling Violations*, U.S. EPA Fact Sheet 3 (Aug. 4, 2010), obtained from <http://www.epa.gov/region1/enforcement/air/pdfs/CAA-MBTA-MBCR-Fact-Sheet.pdf>
3. Memorandum of Understanding on Environmental Justice and Executive Order 12898 (was signed Aug. 4, 2011), obtained from <http://epa.gov/environmentaljustice/resources/publications/interagency/ej-mou-2011-08.pdf>
4. Reporter's Transcript on Appeal, *Ass'n of American Railroads v. South Coast Air Quality Management District*, No. CV 06-01416-JFW, 2007 WL 2439499 (C.D. Cal. Nov. 28-30, 2006).

Trial Day 1: Testimony of Mark P. Stehly and Chris Allen Roberts.

Trial Day 2: Testimony of Chris Allen Roberts and Douglas Wills.

Trial Day 3: Testimony of Joel Benton Ritter, Michael Brazytis,

and Colon Fulk.

5. Letter from Colon Fulk to Barbara Baird, District Counsel SCAQMD (Nov. 13, 2013) *reprinted in U.S. EPA- Petition for Declaratory Order*, FD 35803, at 481-86 (STB served Mar. 25, 2014) (two copies of the three-page letter were submitted with the petition).
6. Letter from SCAQMD to U.S. EPA (Nov. 14, 2013) *reprinted in U.S. EPA- Petition for Declaratory Order*, FD 35803, at 487-500 (STB served Mar. 25, 2014).

The Board may take official notice in declaratory order proceedings. *See Bos. v. Me. Corp. and Springfield Terminal R.R. Co. – Petition for Declaratory Order*, F.D. No. 35749 (October 31, 2013) 2013 STB LEXIS 333, *6. The above matters are proper subjects for official notice. Notice may be taken of a U.S. Government publication posted on the department’s official website. *In re Wellbutrin ST/Zyban Antitrust Litig.*, 281 F. Supp. 2d 751, 755 (E.D. Pa. 2003). Similarly, records of a state government are subject to official notice. *L’Garde, Inc. v. Raytheon Space & Airborne Sys.*, 805 F. Supp. 2d 932, 937-38 (C.D. Cal. 2011). Notice also may be taken of transcribed federal court testimony, which already has been submitted in this proceeding by other parties, without objection.

CONCLUSION

For the reasons set forth herein, in the accompanying Verified Statements and Exhibits, and in the District's February 14, 2014 Reply, the Railroads' objections to the proposed Rules should be overruled, EPA's Petition should be granted, and the Board should affirm that District Rules 3501 and 3502 are enforceable as part of the California SIP under the CAA, and are not preempted by the ICCTA.

Respectfully submitted,

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CERTIFICATE OF SERVICE

I hereby certify that on this 28th day of March, 2014, I served copies of the forgoing Supplemental Comments of the South Coast Air Quality Management District on all known parties of record to this proceeding by first class U.S. Mail, postage prepaid.

A handwritten signature in black ink, appearing to read 'K. Dowd', is written over a horizontal line.

Kelvin J. Dowd

VERIFIED STATEMENT OF
THOMAS E. JOHNSON, P. E. & RICHARD C. BEALL

We are Thomas E. Johnson and Richard C. Beall. Together we have over 70 years of locomotive-related experience in a variety of disciplines. Our relevant experience is set out in more detail below. The South Coast Air Quality Management District (“South Coast”) has asked us to address the impact of its Rule 3502 on locomotive operations, and specifically the steps that locomotive engineers, conductors and yard personnel would take to comply with Rule 3502. As explained below, there are no extraordinary or disruptive measures that locomotive engineers would need to take to comply with the Rule.

I. Qualifications

Thomas E. Johnson, P. E. is President of Railroad & Metallurgical Engineering, Inc., a consulting firm specializing in railroad operations and accident analysis and matters related to engineering/failure analysis, new product development, and product liability.

Mr. Johnson has a Bachelor of Science degree in Metallurgical Engineering from the University of Minnesota. He is a licensed Professional Engineer (P. E.).

From 1981 through 1994, Mr. Johnson was employed by GE Transportation Systems in Erie, Pennsylvania, a division of the General Electric Corporation that manufactures and sells locomotives to the railroad industry. His positions at GE included Senior Metallurgist, Technical Leader-Component Design, Manager-Product Engineering, and Manager-Component Design and Product Engineering reporting to the Manager, Diesel Engine Operation.

While at GE, he worked in the Locomotive Engineering Department. Mr. Johnson wrote Equipment and Material Specifications, introduced new product components, and performed failure analysis on component failures. He studied event recorder downloads, fault logs, and

data packs in working with the railroads to improve performance and reduce failures. He managed various GE design engineering programs that included the design and field testing of locomotives with the Class I railroads. He worked with all of the Class I railroads on locomotive projects and development over his years with GE. Since he began his engineering consulting practice, he has performed engineering consulting services for the Class I railroads and some short line railroads. Much of his work at GE led to the current AESS (Automatic Engine Start/Stop) equipment and strategies that are becoming standard with all the Class I railroads.

Mr. Johnson has taught engineering classes at Gannon University in Erie, PA, and he has been part of the adjunct faculty at the University of Wisconsin, in Madison, WI. In Wisconsin's graduate railroad programs and its operations classes, he taught locomotive operations performance sessions, which emphasized best practices for improving fuel economy and lowering emissions. This portion of the class involved strategies for idling locomotives, isolating extra locomotive power in the train, and shutting down locomotives in a timely fashion. Additional details of Mr. Johnson's experience are included as Exhibit 1.

Mr. Beall is a locomotive engineer with over 40 years of experience in the railroad industry. Mr. Beall worked for the Florida East Coast Railway for almost 20 years. During this period, Mr. Beall was a Qualified Yard Engineer, a Qualified Local Freight Engineer, and a Qualified Through Freight Engineer. He worked as a Switchman, Trainman, Yard Conductor, Local Freight Conductor, Through Freight Conductor, Yard Engineer, Local Freight Engineer and a Through Freight Engineer.

Since his time with the FEC, Mr. Beall has worked as an independent railroad safety and operations consultant, where he has work on a wide variety of railroad matters, including rail

fuel and air brake laws, signaling system issues, equipment standards, inspection standards, event recorder analysis, and other safety matters. Mr. Beall also operates passenger trains for the South Florida Rail Transit Authority where he is a Certified Passenger Engineer and a Qualified Passenger Conductor. Additional details concerning Mr. Beall's qualifications are attached as Exhibit 2.

II. Background on Locomotive Changes

Diesel engines first were developed over 100 years ago. The design is very reliable, and the engine runs optimally at full load. However, locomotives spend so much of their duty cycle at idle, and this results in unburned hydrocarbons building-up in the exhaust manifold. In turn, the build-up causes periods of very high emissions when the locomotive returns to forward notch position thereby burning off the hydrocarbons, which can cause fire out the stack and other undesirable consequences. For many decades, railroads have sought to change this.

In the early part of his career at GE, Mr. Johnson responded to repeated requests by the Class I railroads to save fuel and reduce emissions during idle operations. In the 1980s, the railroads focused on improving the duty cycle of their locomotives by spending less time at idle. Specifically, the railroads requested that GE develop a "low" idle setting and then "low-low" idle options. Each of these lower idle settings required testing, and each step improvement saved about a gallon of fuel per hour in the duty cycle. After these improvements reached their limits, the next step for the Class I railroads was to shut down locomotives when longer delays were expected.

If diesel engines are shut down, fuel consumption is minimized and emissions go to zero. GE, for example, encouraged shutting down locomotives after 30 minutes at idle. The

problems with the shut-down approach included weather (temperature), battery power and life, and other engine variables that made re-starting locomotives difficult. However, after years of development in Auxiliary Power Units and testing for operational limits on ambient temperature, oil temperature, water temperature, battery voltage, and air compressor pressure in the automatic train brake lines, AESS systems became viable. Over the last 10 years, U.S. railroads have been very successful at implementing the shutdown strategy through the inclusion of AESS systems in every new locomotive. Moreover, the newer locomotives are more fuel efficient, and are designed to be easier to start and stop (AESS), which makes complying with Rule 3502 a simple task. In addition, the railroads have retrofitted many older locomotives with AESS systems.

During his career at GE, Mr. Johnson became very familiar with the design and operation of diesel-electric locomotives, including the development of the AC4400 and ES44AC and ES44DC locomotives. These locomotives, along with EMD's SD70MAC and SD70Ace, have become the standard for heavy duty Class I rail service over the past decade. Almost all of these locomotives that are in service today are already equipped with AESS.

Mr. Beall is intimately familiar with the operations of the older locomotives in UP's and BNSF's fleets, including the SD40, GP60, GP40 and GP38 locomotives, which today are used primarily for switching in the BNSF and UP yards. While these locomotives do not enjoy all of the technological benefits of the newer locomotives (although some have been retrofitted with AESS systems), compliance with Rule 3502 is not a departure from current standard operating practices, and the procedures required to comply are straightforward and will not interfere with the operations of the railroads.

III. Rule 3502

Rule 3502 prohibits idling an unattended locomotive for more than 30 minutes if: (i) a crew has gone off-duty and the new crew has not arrived; (2) the crew is taking a meal break; (iii) the locomotive is within yard limits; (iv) the locomotive is waiting to be fueled or serviced; (v) maintenance or inspection work is being done that does not require an active engine. The locomotives can continue to idle if there is cold weather (below 40 degrees F.) or the locomotive batteries need to be charged.

Rule 3502 also requires the trailing engines to be shut down when the crew is informed that it will be delayed on the road for more than 30 minutes. The other exceptions apply in this case as well.

Finally, a railroad is considered to have complied with the Rule if it has a working idling control device (such as an AESS unit) on the train, set for 15 minutes, and it has not been overridden or tampered with by the operator.

IV. Complying with Rule 3502 Will Not Burden Railroad Operations

In Section V below, we detail the particular steps needed to shut down locomotive engines with and without AESS systems and the approximate time to perform such activities. However, we emphasize that none of the steps will impair the operations of the railroads. First, Rule 3502 has nothing to do with the underlying reason why a train will be parked for 30 minutes or more. Whatever operational conditions exist that necessitates a long holding period for a train simply triggers the need to comply with the Rule, but the Rule itself has no impact on any delay for the train. Second, the railroad has control over crew calling and train scheduling, which it uses to ensure compliance with its own operating rules concerning restarting of shut

down locomotives. Specifically, the railroads' own train handling rules already require that the locomotives be shut down if they are going to be left unattended. With certain exceptions, UP's rules are set at 15 minutes (Rule 31.8.7) (Exhibit 3) and BNSF's rules are set at one hour (Rule 106.3) (Exhibit 4). Thus, from an operational standpoint the railroads will be performing the exact same actions required when shutting down or restarting such engines after 15 minutes or one hour, except the engines will be shut down after 30 minutes instead of one hour on BNSF's system. In other words, whatever steps the railroads are using to follow their own operating rules now will not change as a result of their compliance with the Rule.¹

Consider this simple example, a train has traversed a crew district and it is stopping at the next crew change point in a rail yard. Usually the railroad would try to coordinate the pick-up of the crew about to go off duty with the relief crew that will take the train on its next leg. However, congestion over the next segment the train will travel has pushed the schedule back two hours. Thus, the next crew has not been called to the train. The crew going off duty is informed of the delay, and they are instructed to shut down the engines and secure the train because it will be left unattended for more than the required time under the Rule or the railroads' applicable operating rule, whichever is shorter. As most of the trains operating in the Los Angeles Basin are equipped with AESS, this crew can simply follow the several steps shown below to secure an AESS-equipped train and then be picked-up by the crew van. The AESS system will automatically shut down the engines in 15 minutes. The railroads' train operations are not impacted at all by the Rule (i.e., no additional delays are incurred and the fluidity of rail operations is not impacted).

¹ As explained in Section V, handling of distributed power locomotives may require some minor operational changes.

As for restarting service on a train with a shut-down engine, with one potential and partial exception discussed below, complying with the Rule does not require that the railroad perform any action or build in any more time than it would have if the engines were shut down and secured in accordance with the railroads' own operating rules.

Another example demonstrates the point. Consider a train without an AESS system that has been parked in a yard for two hours. Following the railroads own operating practices and Rule 3502, the previous crew shut down the locomotive and secured the train. The railroad has determined that the train can resume operation, and a crew is called. The crew will be briefed and shuttled to the train. At that point, the crew will follow one of the start-up sequences for non-AESS locomotives described below, and the train will resume operations. Rule 3502 has, once again, had no impact. The crew must take the exact same actions notwithstanding the Rule.

Even if there was a burden associated with complying with the Rule for non-AESS equipped locomotives – and the only time this might arise is on BNSF because its operating rules set a one hour time limit before it requires the crew to shut down the engines versus Rule 3502 which sets the time at 30 minutes (UP has a 15 minute limit)² – this concern is a red herring because we understand that more than 95% of the locomotives operating in the area already are equipped with AESS devices. Thus, complying with the Rule would, by definition, have no impact on most of the locomotives operating in the Los Angeles Basin, because the AESS systems should bring the railroads into automatic compliance if the system is properly set. More importantly, as explained above, the particular steps are only needed when the

² We are unsure why BNSF's time limit before shutting down a locomotive is four times greater than UP's, but UP's limit strongly suggests that complying with the Rule is not a burden on railroad operations.

locomotive or train will be left unattended for an extended period of time, which is entirely in the control of the railroads in the first instance.

V. Complying with Rule 3502 “On the Ground”

Extended locomotive idling largely is a phenomenon observed in rail yards. Crew changes, locomotive consist changes, car switching, fueling and maintenance activities all are centered around yard facilities. Many of these activities result in locomotives being left unattended. Historically, many railroaders had an ingrained habit of leaving locomotives running because, in the past, it was easier to keep the locomotive idling – not because they are difficult to shut down, but because the older locomotives were sometimes tricky to restart. But as explained above, such worries are no longer applicable given the complex locomotive status monitoring and AESS systems utilized today.

UP and BNSF have taken full advantage of the technological advancements in locomotives, and they have been aggressive in implementing fuel conservation plans that include shutting down the engines of unattended locomotives.

Below we describe the procedures for shutting down the engines of idling locomotives and the restart of those locomotives based on most of the likely scenarios that a railroad operating employee would face under the circumstances covered by Rule 3502. In some cases, an engineer, conductor, hostler, or other qualified personnel might perform these actions, consistent with typical yard operations. Thus, a crew of a particular train might not perform all of the actions below, but instead they may be aided by other qualified personnel. For example, a yard employee could be assigned the duty of shutting down the engines of a road train once it has parked in the yard.

A. Scenario 1 – Light Locomotive

1. Single Light Locomotive (assumes no AESS retrofit) - For first-generation (Ex. GP7, GP9, F3, etc.) and second-generation diesel locomotives (Ex. GP38, GP40, SD40, etc.).³
 - a. Shutdown Sequence-(approximate time 7 minutes).
 1. Place isolation switch in “Start” position.
 2. Press and hold “Stop” button until engine stops completely.
 3. Place all circuit breakers on the engineman’s control panel (ie: control, fuel pump and generator field switches) in the “Off” position.
 4. Place the reverser handle in the “neutral” position and remove lever from controller.
 5. Pull the main battery switch and turn off all switches in the distribution panel.
 6. Set a hand brake.
 7. Open cylinder test valves on engine (if more than a two hour layover is expected).
 - b. Start-Up (Cranking) Sequence (approximate time 10 minutes)
 1. Place all switches in the distribution panel as well as the battery switch into the “On” position.
 2. Place all circuit breaker switches on the engineman’s control panel in the “On” position.
 3. Place isolation switch in “Start” position.
 4. Place independent brake in the full “application” position.
 5. Check engine lube oil and water levels and oil level in governor and air compressor.
 6. Test signal alarm system by placing isolation switch in “Run” position momentarily. Blue light should come on and alarm bells should ring.

³ BNSF and UP generally use these older locomotives as switching units, helper units, or in smaller in local movements. From data collected from the California Air Resources Board website, it appears that the percentage of such locomotives operating in the Los Angeles Basin is relatively small – it is impossible to tell for certain because the CARB data are snapshots of particular days. http://www.arb.ca.gov/railyard/ryagreement/2006_2010_Inspection_data.pdf

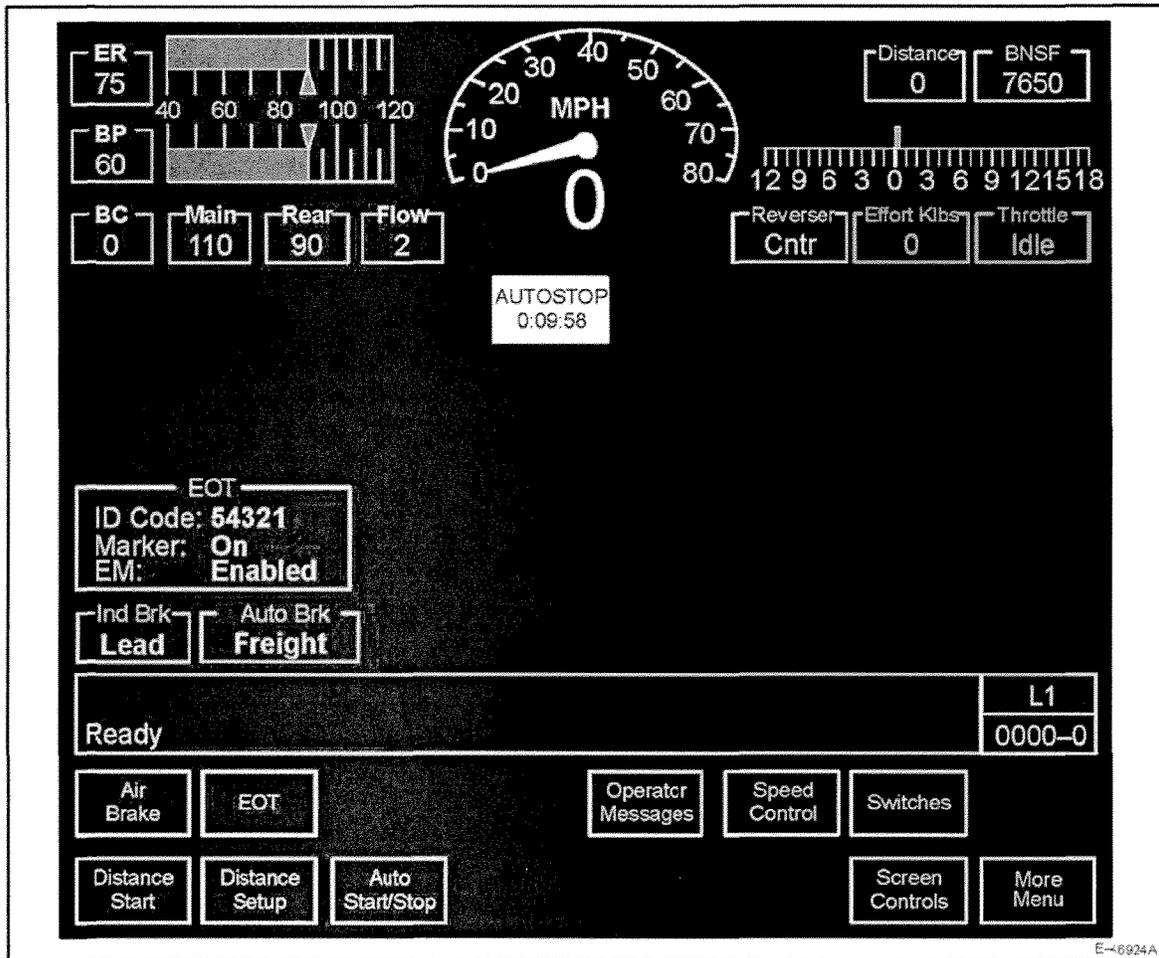
7. If engine has been shut down more than two hours, open cylinder test valves, pull layshaft closed and press “START” button on engine control panel. Crank engine over a few revolutions. Close test valves and proceed in starting engine.
 8. Press engine start button until engine starts (not more than fifteen seconds).
 9. Check oil pressure.
 10. Check starting contactor interlocks.
 11. Idle engine until water temperature comes up to 125 degrees on gauge before working engine.
 12. Place isolation switch in “Run” position.
 13. Remove hand brake after full build-up of air pressure.
2. Single Light Locomotive with AESS System:⁴
- a. Engine Shutdown (approximate crew time: one minute)
 1. Stop the locomotive.
 2. Check that Auto Start-Enabled Indicator is green (EMD); check that Auto Start-Enabled display is set to Ready.
 3. Check that Auto Start-Disable Indicator is set to “Ready-engine stop control not active” (GE Only)
 4. Center the reverser
 5. Place the combined power handle in the IDLE position
 6. Apply the independent brakes
 7. Ensure the EC switch is not set to JOG (GE only)
 8. Ensure Aux Cab door is closed (GE Only)
 9. Ensure Barrier Bar is down and BFCO switch is set to normal (GE Only)
 - b. Auto Restart (approximate crew time: one minute)
 1. Check that Auto Start-Enabled Indicator is green (EMD); check that Auto Start switch is enabled – if applicable (GE)
 2. Check that Inhibit-Disabled indicator is extinguished (EMD only)
 3. Check that throttle position is in IDLE

⁴ UP and BNSF also use the SmartStart system in locomotives that have been retrofitted with an AESS system. The instructions for operating that system are similar as shown in Exhibit 5.

4. Check the EC Switch is not set to JOG (GE Only)
5. Move to forward or reverse
6. Release independent brakes

The AESS locomotives do not need to be manually shut down under the circumstances envisioned under Rule 3502. Instead, the locomotives automatically shut off the engine once 15 minutes have elapsed – based on the automatic engine shut off settings BNSF and UP are using. Should the engine need to restart for some operational reasons, such as charging the battery, it will do so automatically. The AESS-equipped units typically inform the crew when the automatic engine shut down sequence has begun through an audible warning and, as shown below, a visual indication (i.e., the locomotive display screen will include a countdown timer).⁵

⁵ The example shown is from the operating manual of an ES44DC locomotive used by BNSF.



If a consist of light locomotives is being operated, the same sequence applies for the AESS equipped locomotives, except that the operator needs to wait four minutes before proceeding in order to allow the connected locomotives' AESS systems to restart if needed. For the light consist without AESS, the same sequence applies for each locomotive in the consist.

B. Scenario 2 – A freight train with one locomotive at the head end.

1. One head end unit (assumed no AESS retrofit) - For "first-generation" (Ex. GP7, GP9, F3, etc.) and "second-generation turbo-equipped" diesel locomotives (Ex. GP38, GP40, SD40, etc.).
 - b. Shutdown Sequence-(approximate time: 7 minutes, not including setting hand brakes on cars as necessary).

1. Place isolation switch in "Start" position.
 2. Press and hold "Stop" button until engine stops completely.
 3. Place all circuit breakers on the engineman's control panel (ie: control, fuel pump and generator field switches) in the "Off" position.
 4. Place the reverser handle in the "neutral" position and remove lever from controller.
 5. Pull the main battery switch and turn off all switches in the distribution panel.
 6. Set a hand brake.
 7. Open cylinder test valves on engine (if more than a two hour layover is expected).
 8. Set hand brakes on railcars if required by railroad operating rules (usually a specific number of handbrakes will be set based on conditions). An example of the hand brake requirements from BNSF's Air Brake and Train Handling Rules is included as Exhibit 6.
- b. Start-Up (Cranking) Sequence (approximate time: 10 minutes, not including releasing handbrakes on cars as necessary)
1. Place all switches in the distribution panel as well as the battery switch into the "On" position.
 2. Place all circuit breaker switches on the engineman's control panel in the "On" position.
 3. Place isolation switch in "Start" position.
 4. Place independent brake in the full "application" position.
 5. Check engine lube oil and water levels and oil level in governor and air compressor.
 6. Test signal alarm system by placing isolation switch in "Run" position momentarily. Blue light should come on and alarm bells should ring.
 7. If engine has been shut down more than two hours, open cylinder test valves, pull layshaft closed and press "START" button on engine control panel. Crank engine over a few revolutions. If liquid was discharged from cylinders, investigate; if not, close test valves and proceed in starting engine.

8. Press engine start button until engine starts (not more than fifteen seconds).
 9. Check oil pressure.
 10. Check starting contactor interlocks.
 11. Idle engine until water temperature comes up to 125 degrees on gauge before working engine.
 12. Place isolation switch in "Run" position.
 13. Release the hand brakes on the cars.
 14. Remove the locomotive hand brake after full build-up of air pressure.
2. One head end unit with AESS System.

The same shutdown and startup sequence described above is used in this Scenario. The AESS system will maintain the air brake pressure as necessary, including automatically restarting to keep the system at the proper pressure. The AESS also will ensure that the batteries remain charged and that the locomotive otherwise is ready to operate with minimal start-up time once the locomotive is reengaged by the crew.

B. Scenario 3—A freight train with two or more locomotives at the head end.

1. Two or more locomotives at the head end - For "first-generation" (Ex. GP7, GP9, F3, etc.) and "second-generation turbo-equipped" diesel locomotives (Ex. GP38, GP40, SD40, etc.).

The shut down and start up sequence is the same as that used for the single engine on the head end. The hand brakes must be applied to all of the locomotives in the consist.

2. Two or more locomotives at head end equipped with AESS.

The shut down and start up sequence is the same as that used for the single engine on the head end. However, on start up, the operator must wait four minutes or so (GE locomotives) for the other locomotives in the consist to resume operational status if they were automatically shut down by the AESS system.

C. Scenario 4 – Distributed Power

Distributed power can be different from the previous scenarios involving multiple locomotive units because one or more of the locomotive units are not directly connected to

each other. Instead the distributed power unit(s) is placed at the rear of the train, or it might be “cut-in” to the middle of the train, or both. These locomotives are operated via direct radio link with the lead head end unit rather than by direct wire connection.

The link between the distributed power unit and the lead unit is established using a series of commands on the locomotives’ on-board computer system. Once the link is established, the distributed power unit can operate in several modes, but the most common is the synchronous mode, wherein the distributed power unit mimics the operations of the lead locomotive.

Distributed power usually is used on longer road trains where the benefits of such power distribution can aid in the operating dynamics of the train and increase the number of cars that can be included in the train due to the increased horsepower capabilities and the ability of the distributed power unit to operate as a type of remote helper unit.

Shutting down distributed power engines is straightforward and the resulting benefits to fuel consumption and air quality are easily justifiable in our opinion, particularly in an area with historical air quality problems. Moreover, these trains should not generally be idling unattended for long periods of time, given the time sensitive nature of much of the traffic moving from the Los Angeles Basin. The Los Angeles Basin is the key originating area for much of the intermodal traffic handled by BNSF and UP. These trains, which often use distributed power configurations, are given high priority from dispatchers and crew callers. Thus, we would not expect that the trains would be left unattended with any regular frequency, and the shutdown procedures described below would therefore be used sparingly.

Before turning to the specific sequences that can be used to shutdown the locomotive engines on distributed power-equipped trains, we must address several preliminary matters. First, when a train is going to be left unattended, the crew necessarily will exit the train. In the typical scenario, such as a crew change, the crew will secure the train and will be picked up by a crew hauling vehicle – it might be a van, a truck, etc. The crew pick-up usually is necessary because the crew change points tend to be yard facilities, and the size of the yards are such that it is often impractical to have the crews walking to and from the yard buildings⁶ – UP’s West Colton Yard located near Colton, CA for example, is about five miles long and in the train-length layover areas of the yard there are as many as 11 tracks. Moreover, it is safer to move a crew across the tracks in a vehicle that has a radio connected to the yard superintendent/yard dispatcher office, thereby making it easier to avoid moving trains, etc.

Second, the road crews are not the only personnel handling locomotives and trains in these locations. Switching crews, hostlers, and maintenance personnel regularly handle such trains and locomotives. For example, locomotive power may be taken off a train for fueling, 92-inspections, or to be placed in other service. The yard-based personnel normally would handle such activities. These same crews will assemble the distributed power consists as well. Thus, in keeping locomotive idling to a minimum, the road crews regularly are aided by the yard crews.

1. Engine Shutdown Scenarios for DP Trains (approximate time: 20 minutes).⁷
 - a. Scenario No. 1
 - i. The train stops as it enters the yard area.
 - ii. One crew member exits the train.
 - iii. Train continues until parked.

⁶ Remote crew change locations are also served by vehicle.

⁷ The times indicated in these steps do not include setting or releasing of hand brakes on railcars as required under the railroads’ operating rules any time a train is left unattended.

- iv. The crew member that exited enters the distributed power unit.
 - v. The crew member in the lead locomotive unlinks the DP unit and returns the lead locomotive to normal operation. The AESS will reactivate.
 - vi. The crew member in the DP locomotive cancels DP operation mode and returns to normal operation mode. The AESS will reactivate.
 - vii. Both crew members follow the procedure for securing an AESS locomotive and/or head end consist.
- b. Scenario No. 2 (approximate time: 5 minutes if aided by yard personnel or 20 minutes if not aided).
- i. The train is parked in the yard.
 - ii. The lead locomotive is unlinked from the DP unit. The AESS will reactivate.
 - iii. The crew follows the procedure for securing an AESS locomotive and/or head end consist.
 - iv. The crew is picked up and taken to the distributed power unit.
 - v. The crew or a yard employee using a separate vehicle then enters the distributed power unit (a yard employee could enter as soon the train is parked).
 - vi. The crew member or yard employee ends distributed power operation. The AESS will reactivate.
 - vii. The crew follows the procedure for securing an AESS locomotive.
- c. Scenario No. 3 (approximate time: 20 minutes)
- i. The crew leaves the lead and DP units idling.
 - ii. A yard crew, using a vehicle, follows the procedures of Scenario No. 2 if it is determined after the crew has left that the train will idle for more than 30 minutes.

2. Engine Start-up Procedures

- a. Scenario No. 1 (approximate time: 20 minutes for the yard employee)
 - i. When the orders are received and a crew is assigned to the train, the yardmaster simultaneously assigns a yard employee(s) to proceed to the train.
 - ii. While the crew is receiving its mandatory briefing, the yard employee, using a vehicle, proceeds to the train and enters the

- distributed power unit and sets it in DP mode, and releases the hand brake.
- iii. The yard employee proceeds to the lead locomotive unit and relinks the distributed power unit and performs any necessary system checks, such as a distributed power brake pipe leakage test.
 - iv. The road crew arrives, performs any required checks, releases the hand brakes and proceeds.
- b. Scenario No. 2 (approximate time: 20 minutes, not including the time to take crew to the train in the first instance, which would be necessary even if the locomotives were left idling)
- i. The road crew receives its briefing.
 - ii. The road crew is shuttled to the distributed power unit.
 - iii. One crew member enters the distributed power unit and sets the unit to DP mode and releases the hand brake.
 - iv. The crew is shuttled to the lead unit.
 - v. The crew relinks the DP unit and performs any necessary system checks, such as a distributed power brake pipe leakage test.
 - vi. The crew releases the handbrake and proceeds.
- c. Scenario No. 3 (approximate time: 5 minutes, not including the time to take crew to the train in the first instance, which would be necessary even if the locomotives were left idling)
- i. The road crew receives its briefing.
 - ii. The road crew is shuttled to the lead unit.
 - iii. A yard crew proceeds to the distributed power unit and sets the unit to DP mode and releases the hand brake.
 - iv. The crew relinks the DP unit from the lead unit and performs any necessary system checks, such as a distributed power brake pipe leakage test.
 - v. The crew releases the handbrake and proceeds.

The AECS system will keep the locomotives in a state where they can resume operations easily, thereby saving time by avoiding a manual start sequence needed for a fully shut down locomotive. The distributed power linking and unlinking is all performed through the

locomotive's software. The linking and unlinking procedures are simple and straightforward.

The steps, taken from BNSF's distributed power operational instructions, are shown below:

1. Linking (Distributed Power Unit)
 - a. Select the MORE Menu.
 - b. Select the DIST POWER key from the menu options.
 - c. From the Distributed Power Main Menu, choose the REMOTE SETUP key.
 - d. Enter the LEAD IDP (or DP) unit number.
 - e. Designate the direction of the remote unit as either SAME as or OPPOSITE of the lead unit.
 - f. Press ACCEPT.
 - g. Verify LEAD CUT IN and DP ENABLED. (or DP REMOTE)
 - h. Place the independent brake valve handle in RELEASE.
2. Linking (Lead Unit)
 - a. Select the MORE Menu.
 - b. Select the DIST POWER key from the menu options.
 - c. At the Distributed Power Main Menu, select the LEAD SETUP key
 - d. Enter the number of the remote DP unit to be linked and select LINK (repeat if there are additional units)
 - e. Perform any required test, such as the brake pipe continuity test.
 - f. Release the brakes following the test
 - g. Select DP MAIN MENU
 - h. Select MODE.
 - i. Select RUN or IDLE.
 - j. Press EXECUTE.
 - k. Begin operations.
3. Unlinking (Lead Unit)
 - a. Stop the train.
 - b. Fully apply the independent brake.
 - c. Place the throttle in IDLE.
 - d. Make a 20-pound automatic brake pipe reduction.
 - e. From the right screen (or DP Main Menu):

- f. Select the system display key.
 - g. Press the UNLINK key followed by the EXECUTE key.
4. Unlinking (Distributed Power Unit)
- a. Select the distributed power key.
 - b. Select END DISTRIBUTED POWER.
 - c. Turn the DATA RADIO circuit breaker OFF (or Distributed Power and TIM breakers).
 - d. Condition the locomotive brakes for normal operation.

The linking procedures are not time consuming. Indeed, it only requires that the crew perform a few steps on the locomotives' on-board control system, which should not take more than a few minutes.

Briefly summarized, the above procedures should not add any additional train operation time on the shutdown side of the operation because, of course, the train is going to be left unattended for at least 30 minutes. Thus, there is no operational penalty for such trains because they will not resume operations for some time.

When restarting operation of the train, the crew should have enough time between its briefing and its departure time to allow for the relinking procedure, and that additional time can be factored in by the crew callers and yard superintendent in the first instance.

Alternatively, a yard crew can perform all of the necessary work before hand, or a yard crew can proceed to the distributed power unit while the road crew proceeds to the lead unit. Such activities are similar to the work done when locomotives are swapped-out or a distributed power train is configured in the first instance, except it take less time because the locomotives

and brake pipes are already connected to the train.⁸ Regardless, the train need not be delayed at all with proper planning.

V. Conclusion

Complying with Rule 3502 should not interfere with the railroads' operations. We understand that over 95% of the locomotives operating in the Los Angeles Basin are already equipped with AESS systems. For the few remaining older locomotives without AESS, none of them are likely to be used in time-sensitive road service, and both railroads already require that the units be shutdown to conserve fuel if they will not be used for an hour. Setting the shutdown time to 30 minutes for those locomotives is therefore inconsequential. As for the few distributed power trains that will dwell for more than 30 minutes unattended, as we have shown, shutting those engines down does not burden the railroad if handled properly.

⁸ According to UP, moving the locomotives to a train, connecting them to the train, connecting the brake pipes, and setting up distributed power linking takes about 30 minutes in UP's City of Industry Yard. *Distributed Power: It's a Bigger Deal than You Think*, Trains Magazine, page 28 (Sept. 2010). Here, the fastest part of the distributed power setup is all that is needed, linking the locomotives and performing the brake tests.

VERIFICATION

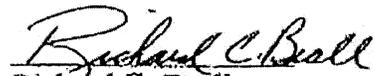
I, Thomas E. Johnson, declare under penalty of perjury, that the foregoing Statement is true and correct, and that I am qualified and authorized to file this Statement.

/s Thomas E. Johnson
Thomas E. Johnson

Executed on: March 27, 2014

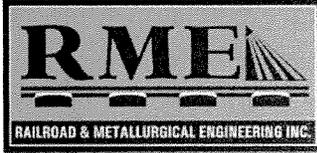
VERIFICATION

I, Richard C. Beall, declare under penalty of perjury, that the foregoing Statement is true and correct, and that I am qualified and authorized to file this Statement.


Richard C. Beall

Executed on: March 27, 2014

Exhibit 1



Curriculum Vitae

Experience

Railroad & Metallurgical Engineering, Inc. (1997 - Present)

An engineering consulting practice focused on expert witness consulting in railroad litigation and product liability, metallurgical engineering and failure analysis, accident reconstruction, railroad engineering, and new product development.

Professional Engineer and Consultant

- Assignments and litigation cases include:
 - FELA and OSHA injury investigations involving component failure analysis and event recorder download analysis, as well as locomotive/equipment operation evaluation, including inspection, maintenance, and overhaul procedures.
 - Accident reconstruction analysis involving: railroad equipment, trucks, automobiles, motorcycles, and pedestrians (determine the root cause and supporting evidence)
 - Performing train derailment investigations
 - Product liability investigations on a wide variety of system / component designs and materials including: locomotives / railcars (handbrakes, bearings, engines, wheels, axles, horns, shocks/coil springs, welds) and non-transportation equipment.
 - Metallurgical engineering of components in the steel, automotive, truck, and railroad industries. Analysis includes: material selection, mechanical properties, chemistry, heat treatment, and failure analysis.
 - Diesel-electric locomotive design and operation analysis, including: fuel consumption analysis, event recorder / fault log / data pack analysis, and rough-riding locomotive analysis.
 - Locomotive fuel consumption testimony before the Surface Transportation Board (STB) on a number of occasions, including analysis, calculations and fuel consumption.
 - Railroad equipment (locomotives, railcars, MOW) design and failure analysis including design drawing evaluation, as well as adherence to design specifications and maintenance/repair procedures.
 - Failure Analysis performed on a wide variety of transportation equipment as well as other components made out of metal materials.
 - Analysis of FRA, CFR, and GCOR rules and regulations and interpretation to determine adherence to these regulations.

CAREER EXPERIENCE, CONTINUED**Horton Inc., Minneapolis, MN (1994-1997)**

A \$90 MM, privately held company with almost 500 employees in three states. Divisions included Horton Industries Inc., a leading supplier of semi-truck fan clutches, and Horton Manufacturing Company Inc., a manufacturer of pneumatic clutches and brakes for industrial applications.

Vice President - R&D, Horton, Inc. (1996-1997)**Vice President - Engineering, Horton Industries (1994-1996)**

- Led product engineering efforts for current and new products for Horton Industries, then a \$60 MM division.
- Worked closely with the sales organization and customer accounts; orchestrated successful effort to reduce warranty problems through improved product design.
- Managed budgets up to \$3.5MM; oversaw up to 30 people in Minnesota and South Dakota.

GE Transportation Systems, Erie, PA (1981 - 1994)

A \$1 billion manufacturer of railroad locomotives; Division of General Electric.

Manager - Component Design and Product Engineering (1993 - 1994)

- Reported to Manager, Diesel Engine Operation, with dual responsibility for engine Component design and product engineering.
- Direct reports included six design engineers, reliability engineer, senior material engineer, test lab supervisor, and 12 associates, fuel/lubrication specialist and five product engineers.

Manager - Product Engineering (1989 - 1993)

- Reported to Manager of Engine Engineering, responsible for all aspects of diesel engine Product engineering, reliability, and quality.
- Oversaw product change staff of 12 including engineering, manufacturing, purchasing Supplier, quality, and drafting.
- Conducted new component design reviews before Division Chief Engineer, including reviews of FEA models, strain gauge testing, prototype bench testing and field testing.

Technical Leader - Component Design (1987 - 1989)

- Reported to the Manager of Engine Engineering. Supervised three design engineers in two locations. Conducted failure investigation of reliability issues; coordinated design improvement through all stages of development.

CAREER EXPERIENCE, CONTINUED**Senior Metallurgist (1981 - 1987)**

- Worked closely with vendors, purchasing, and supplier quality, involved in all manufacturing processes and material specification writing. Conducted materials analyses of failed components, in cooperation with customer service, marketing and railroad management.

The Bendix Corporation - Southfield, MI (1979-1981)

A supplier of automotive components such as brakes and fuel pumps.

Senior Metallurgist - Engineering Development - Materials Department

The Chrysler Corporation, Highland Park, MI (1978 - 1979)

A major automotive manufacturer.

Materials Development Engineer - Cast Metal Laboratory and Steel Development Group

St. Paul Technical Vocational Institute, St. Paul, MN (1976-1978)

A community and technical college.

Instructor- Metallurgy and Testing Lab Classes

North Star Steel St. Paul, MN (1972-1976)

A supplier of raw structural steel. Subsidiary of Cargill, Inc.

Project Metallurgist - Quality Control

Education**University of Minnesota Institute of Technology**

Bachelor of Science - Metallurgical Engineering (1974)

Graduate Metallurgical Engineering @ the University of Minnesota.

Graduate MBA Coursework @ Gannon University.

Credentials and Affiliations

- Licensed Professional Engineer (PE-033313E), (1984 - Present)
- Minnesota Society of Professional Engineers (1997 - Present)
- National Society of Professional Engineers (1997 - Present)
- Certified Accident Reconstructionist (2004 - Present)
- Accreditation Commission for Traffic Accident Reconstruction (ACTAR # 1517)
- Adjunct Faculty, Material Science, Gannon University (1983-1993)
- American Society for Metals (ASM) (1978-present)
- American Foundry Society (AFS) (1997 - Present)
- Society of Automotive Engineers (SAE) (1994 - Present)
- Certified OSHA General Industry Regulations (2011 - Present)
- Adjunct Faculty, University of Wisconsin - Madison (2008 - 2009)

Lectures and Publications

- "Applied Physics for Collision Reconstruction", MwATAI, Waterloo, Iowa, November 11-15, 2013.
- "Locomotive Developments in Fuel Consumption, Emissions, & Hybrid Designs," National Association of Railway Safety Consultants and Investigators, Chicago, IL, September 20-21, 2012.
- "Locomotive & Equipment Investigations," National Association of Railway Safety Consultants and Investigators, Minneapolis, MN, September 15-17, 2011.
- "Evidence Preservation Techniques", presented at the National Association of Railway Safety Consultants and Investigators, Atlanta, GA, May 7, 2010.
- "Characteristics and Applications of Motive Power," presented at Freight Railroads: Best Operating Practices, 3 Day Course at the University of Wisconsin - Madison, Sept 28 - 30, 2009.
- "Fire and Emergency Incidents (Railroads)," presented to the Sherburne County Sheriff's Office and Fire Departments, July 23, 2009.
- "Characteristics and Applications of Motive Power," presented at Freight Railroads: Best Operating Practices, 2 Day Course at the University of Wisconsin - Madison, Oct 21 - 22, 2008.
- "Railroad Accident Forensics and Investigation by Railroad Litigation Experts", 16th Annual Convention of the Academy of Rail Labor Attorneys, Washington, DC, April 28, 2005.
- "Design and Handling of Remote Control Locomotives", National Association of Railway Safety Consultants and Investigators, St. Louis, MO, May 6, 2005.
- "Diesel-Electric Locomotive Design Update" - Locomotive Design, Event Recorder Design, & Locomotive Fuel Consumption, National Association of Railway Safety Consultants and Investigators, St. Louis, MO, May 9, 2003.
- "Material Properties of Compacted Graphite Iron", Cutting Tool Magazine, 2001.
- "Defense of Right of Way Fire Claims", invited and presented at the AAR Fall Claims Conference, Hosted by Canadian National Railroad, Montreal, Canada, August 25-27, 1999.
- "Locomotive Design", Annual Rail Seminar, National Association of Railway Safety Consultants and Investigators, Atlanta, GA, May 13-15, 1999.

- “Locomotive Design”, FELA Reporter Article, spring, 1998.
- Material Science for Engineers, BS Semester Course, Gannon University, Erie, PA 1985-1993.

Educational Training, Courses, Seminars and Conferences

- “Annual Seminar”, Railway Interchange 2012, sponsored by RSI, AREMA, REMSA, & RSSI, Chicago, IL, September 23-25, 2012.
- “Annual Railroad Seminar,” National Association of Railway Safety Consultants and Investigators, Chicago, IL, September 20-21, 2012.
- “Derailment Causation Seminar”, American Short line & Regional Railroad Association (ASLRRA), Teddy Maybrier, Minneapolis, MN, September 11-12, 2012
- “Regional Conference”, American Short line & Regional Railroad Association (ASLRRA), Minneapolis, MN, September 9-11, 2012.
- “Annual Conference”, Midwest Regional Railroad Association, Two Harbors, MN, July 15-17, 2012.
- “Understanding and Complying with FRA213 Track Safety Standards”, University of Wisconsin-Madison, May 22, 2012.
- “CWR and Thermal Forces Workshop”, University of Wisconsin-Madison, May 21, 2012.
- “Annual Seminar”, Railway Interchange 2011, sponsored by RSI, AREMA, REMSA, & RSSI, Minneapolis, MN, September 18-21, 2011.
- “Annual Railroad Seminar,” National Association of Railway Safety Consultants and Investigators, Minneapolis, MN, September 15-17, 2011.
- “Failure Analysis,” Material Science Annual Seminar, American Society for Metals (ASM), Hennepin County Technical Center, Brooklyn Park, MN, February 23, 2011.
- “Human Factors for Traffic Accident Reconstruction,” The Crash Safety Research Center, Jeffrey W. Muttart, Amherst, MA, October 25 – 29, 2010.
- “Fall Technical Conference,” ASME Rail Transportation Division, Roanoke, VA, October 12 – 13, 2010.
- “Annual Railroad Seminar,” National Association of Railway Safety Consultants and Investigators, Atlanta, GA, May 6 – 7, 2010.
- “Forensic Engineering: Engineers as Expert Witnesses, Case Studies, and Ethics,” Minnesota Society of Professional Engineers course at University of St. Thomas, April 8, 2010.
- “Emerging Legal Issues for Engineers,” Minnesota Society of Professional Engineers course at St. Thomas University, March 24, 2010.
- “Material Selection,” American Society for Metals Annual Seminar, February 24, 2010.
- “Railroad Operations: Best Practices,” presented at University of Wisconsin – Madison, September 28 – 30, 2009.
- “LMOA & Air Brake Association Meetings,” Railway Supply Institute (RSI), Chicago, IL, September 16 – 18, 2009.
- “Corrosion,” Material Science Annual Seminar, American Society for Metals (ASM), Hennepin County Technical Center, Brooklyn Park, MN, February 18, 2009.

- “Railroad Operations: Best Practices,” presented at University of Wisconsin – Madison, October 21 – 22, 2008.
- “Railroad Forensics & Accident Investigation – CrashTeams Rail,” presented at CrashTeams Conference, Kamloops, BC, Canada, August 12 – 14, 2008.

EDUCATIONAL TRAINING, CONTINUED

- “Auto-Pedestrian Accident Investigation,” presented by West Coast Accident Reconstruction Equipment and Education (We CARE), Vallejo, CA, April 20 – 24, 2008.
- “Heat Treating,” Material Science Annual Seminar, American Society for Metals (ASM), Hennepin County Technical Center, Brooklyn Park, MN, February 27, 2008.
- ASME (American Society of Mechanical Engineers) - ICED Conference and Meeting, Charleston, SC, October 15-17, 2007.
- Railroad Engineering Course, University of Wisconsin Education and Training for the Rail Industry, Madison, WI, October 8-10, 2007.
- ASME (American Society of Mechanical Engineers) -RTD-RSI (Railway Supply Institute) Joint Rail Conference, Chicago, IL, September 11-14, 2007.
- ACTAR- The Midwest Association of Technical Accident Investigators (MATAI) Conference & Meeting, St. Paul, MN, May 15-18, 2007.
- Annual Rail Seminar, National Association of Railway Safety Consultants and Investigators, St. Louis, MO, May 3-4, 2007.
- 12th Annual Research Review, Transportation Technology Center (TTCI), & ASME Meeting, Pueblo, CO, March 11-15, 2007.
- Material Science Annual Seminar, American Society for Metals (ASM), Hennepin County Technical Center, Brooklyn Park, MN, February 28, 2007.
- Expert Witness Course, (SEAK), Chicago, IL, December 1-2, 2006.
- Crash Data Retrieval Course, Collision Safety Institute, Warsaw, IN, October 9-12, 2006.
- Locomotive Maintenance Officer’s Association Meeting (LMOA), & 98th Annual Convention and Technical Conference of the Air Brake Association, Railway Supply Institute (RSI), Chicago, IL, September 17-20, 2006.
- Rail 0107, Rail Accident Scene Investigation, British Columbia Institute of Technology (BCIT), Vancouver, Canada, September 11-13, 2006.
- 11th Annual Research Review, Transportation Technology Center (TTCI), Pueblo, CO, March 14-15, 2006.
- Material Science Annual Seminar, American Society for Metals, Hennepin County Technical Center, Brooklyn Park, MN, February 22, 2006.
- Annual Rail Seminar, National Association of Railway Safety Consultants and Investigators, St. Louis, MO, May 5-6, 2005.
- “Design of Railway Track Systems”, University of Wisconsin Education and Training for the Rail Industry, Rolling Meadows (Chicago), Illinois, May 4-5, 2005.
- 16th Annual Convention, Academy of Rail Labor Attorneys, Washington, DC, April 26-29, 2005.
- “North American Rail Mechanical Operations Seminar”, Association of American Railroads, March 28-30, 2005.

- Material Science Annual Seminar, American Society for Metals, Hennepin County Technical Center, Brooklyn Park, MN, February 23, 2005.
- 11th Annual Rail Liability Seminar, Railroad Defense Bar, Milwaukee, WI, July 15-16, 2004.

EDUCATIONAL TRAINING, CONTINUED

- Locomotive Maintenance Officer's Association Meeting, & 96th Annual Convention and Technical Conference of the Air Brake Association, (LMOA), Railway Supply Institute, Chicago, IL, September 26-29, 2004.
- Passed ACTAR Exam for full accreditation as a Certified Traffic Accident Reconstructionist, Accreditation Commission for Accident Reconstruction, May 28, 2004. ACTAR # 1517.
- Accident Reconstruction II, ACTAR Certification Course, Northwestern University Transportation Institute, Evanston, IL, April 12-23, 2004. I passed the Exam on April 23, 2004.
- Accident Reconstruction I, ACTAR Certification Course, Northwestern University Transportation Institute, Evanston, IL, April 26-30, 2004. I passed the Exam on April 30, 2004.
- Material Science Annual Seminar, American Society for Metals, Hennepin County Technical Center, Brooklyn Park, MN, February 25, 2004.
- Rail Transit Engineering Seminar, University of Wisconsin Education and Training for the Rail Industry, Madison, WI, February 9-10, 2004.
- "Annual Proceedings of the International Association of Railway Operating Officers, Railway Supply Institute, September 22-24, 2003.
- "95th Annual Convention and Technical Conference of the Air Brake Association, Railway Supply Institute, September 22-24, 2003.
- Annual Meeting and Seminar, American Short Line and Regional Railway Association (ASLRRA), Philadelphia, PA, May 18-20, 2003.
- Annual Rail Seminar, National Association of Railway Safety Consultants and Investigators, St. Louis, MO, May 9-10, 2003.
- Material Science Annual Seminar- "Stainless Steels & Super Alloys", American Society for Metals, Hennepin County Technical Center, Brooklyn Park, MN, February 26, 2003.
- Failure Analysis Course @ Materials Evaluation and Engineering, Inc., American Society for Metals, Plymouth, MN, November 2-4, 2002.
- Locomotive Maintenance Officer's Association Meeting, & 94th Annual Convention and Technical Conference of the Air Brake Association, (LMOA), Railway Supply Institute, Chicago, IL, September 22-25, 2002.

Thomas E. Johnson, P. E.

July, 2013

Exhibit 2

RICHARD C. BEALL
8211 S.W. 192 Street
Miami, Florida 33157
(305) 251-4554

CURRICULUM VITAE

Professional Work History:

1988 - PRESENT

RAILROAD SAFETY & OPERATIONS CONSULTANT

Consultant retained by Plaintiff's, Defendant's, Insurance Carriers and Industry in cases involving Expert related railroad testimony.

These assignments and prior/present employment involve my experience and expertise in all facets of Railroad Fuel and Air Brake Laws, Interlocking Systems, Centralized Traffic Control, Dispatching Techniques, Engineer Certification Standards and Practices, Safety Rules, Equipment Standards, Inspection Practices, Operating Procedures, Safety Programs, Crew Duties, Federal and State Regulations, Industry Standards, Safety Standards, Scene Inspections, Event Recorder Analysis, and Stopping Distances and Reconstruction. Also involved is expertise in Railroad Worker related accidents and FELA related cases.

Consultative services have also included assisting counsel in understanding the railroading involved in an accident, framing discovery, searches for applicable rules and accident reconstruction.

Interviewed numerous times by television and radio personalities in connection with Railroad Industry related issues.

1996 - 2012

ENGINEER/CONDUCTOR

Employed formerly by Herzog Transit Services, Inc., and by Veolia Transportation Services, Inc., which is the contracting company that operates all trains for the South Florida Rail Transit Authority (Tri-Rail).

Certified Passenger Engineer
Qualified Passenger Conductor

RULES CERTIFIED ON: GCOR, NORAC, CSX Transportation, Florida East Coast Railway.

Extensive expertise in event recorder download/interpretation.

1997 - 1998

TRAINMASTER, CONTRACTS ADMINISTRATOR & SAFETY DIRECTOR

Employed by First American Railways, Inc., which owned and operated the Florida Fun-Train. The job entailed coordinating and enforcing all contract work between the company and all sub-contractors, i.e. Amtrak, Rader Railcar, etc. I was also the Safety Director and Administrator for First American Railways which also owns and operates the Durango & Silverton Narrow Gauge Railroad in Colorado. I also investigated and handled all Risk Management issues for the Company.

1988 - 1996

LEGAL INVESTIGATOR

For Attorneys J. B. Spence and Roland W.(Buddy) Payne in the law firm of Spence, Payne, Masington & Needle, P.A.

The job entailed meeting with clients and attorneys and investigating all facets of personal injury cases. Cases handled involved motor vehicle accidents, pedestrian accidents, railroad and airline crashes and accidents, mechanical failures or related, products liability, workers compensation, maritime and medical malpractice.

As investigator I coordinated with police and investigative agencies, located and photographed all vehicles, clients and crash sites, witness statementizing, preservation of evidence and hired and coordinated experts and accident reconstruction. The investigator stayed with the case through mediation, settlement or trial.

1969 - 1988

EMPLOYED BY FLORIDA EAST COAST RAILWAY

Qualifications:

Switchman, Trainman, Yard Conductor, Local Freight Conductor, Through Freight Conductor, Yard Engineer, Local Freight Engineer and Through Freight Engineer.

Passed written and oral tests every six months since 1969 on Railroad Rules and Safety Rules.

Qualified Yard Engineer - 18 years.

Qualified Local Freight Engineer - 17 years.

Qualified Through Freight Engineer - 16 years.

Training/Teaching Experience:

Presided over and taught numerous lectures, seminars and presentations at National Railroad Consultants Conventions.

Currently head up Veolia Transportation's Critical Incident Stress Management team.

As Safety Director, numerous workshops, presentations, drills and seminars to employees on all facets of railroad safety issues.

As Trainmaster coordinated all rules and safety classes as well as supervised and trained crews and rail personnel.

Experienced aerial photographer.

Master model builder. Proprietor and President of Model Masterpieces & Exhibits by Richard Beall. Models built for architects, movie sets, trade shows and courtroom evidentiary exhibits depicting accident scenes, working exhibits and or full size replicas.

While with Railroad, taught and trained hundreds of Switchmen, Trainmen, Yard Foremen, Conductors and Locomotive Engineers.

Organizations & Memberships:

NATIONAL ASSOCIATION OF RAILROAD SAFETY CONSULTANTS AND INVESTIGATORS, (former member Advisory Board).

AMERICAN NATIONAL STANDARDS INSTITUTE, (ANSI) RAILROAD STANDARDS COMMITTEE.

OPERATION LIFESAVER, Florida Chapter, served on Board of Directors.

Publications:

Authored and contributed to Chapters in "TRAIN ACCIDENT RECONSTRUCTION AND FELA & RAILROAD LITIGATION" by James R. Loumiet, B.S.M.E. and William G. Jungbauer, Esquire.

Co-authored "RAILROAD ACCIDENT INVESTIGATIONS" with James R. Loumiet. (This is a publication in progress).

Wrote, and placed into effect, First American Railway's / Florida Fun-Train "System Safety and Emergency Response Plan".

Lectures and Presentations Presented:

"Railroad Protocol & Procedures," Florida International University (History of American Railroads) Miami, FL., March 2012.

"Railroad Operating Rules & Procedures," Florida International University (History of American Railroads) Miami, FL., March 2010.

"Changes in Railroad Operations & Operating Practices," Florida International University (History of American Railroads) Miami, FL., April 2008.

"Railroad Forensics and Accident Investigation," Academy of Rail Labor Attorneys, Washington, DC, April 2005.

"Developments in End of Train Braking Systems," National Association of Railroad Safety Consultants and Investigators, St. Louis, MO., May 2000.

"Demonstrative Evidence in the Courtroom," National Association of Railroad Safety Consultants and Investigators, Atlanta, Ga., May 1999.

"Court Presentations Utilizing Scale Models as Exhibits," National Association of Railroad Safety Consultants and Investigators, San Antonio, Tx., May 1998.

"Anatomy of a Train Accident," National Assoc. of Railroad Safety Consultants and Investigators, Nashville, TN., May 1994.

"Locomotive Operation and Engineer Responsibilities," National Association of Railroad Safety Consultants and Investigators, Nashville, TN., May 1993.

"Demonstrative Evidence in Railroad Related Cases," National Association of Railroad Safety Consultants and Investigators, Nashville, TN., May 1992.

Professional Seminars, Conferences & Courses Attended:

1. *"Changes in FRA Regulations,"* presented by Adville Montgomery, U.S. DOT/FRA and Gregory Drakulic, U.S. DOT/FRA, **FRA Standards & Practices Conference**, Miami Springs, FL, May 2007.
2. *"Railroad Retirement Issues Related to Railroad Employee Injuries,"* presented by Thomas W. Sadler, Counsel & Assistant to the Labor Member U.S. Railroad Retirement Board, **Academy of Rail Labor Attorneys**, Washington, DC, April 2005.
3. *"The "Invisible" Safety Appliance Deviations,"* presented by Michael J. O'Brien, FRA Expert, **Academy of Rail Labor Attorneys**, Washington, DC, April 2005.
4. *"Address by U.S. Representative Robert R. Simmons,"* to **Academy of Rail Labor Attorneys**, Washington, DC, April 2005.
5. *"Revisiting Retaliatory Discharge,"* presented by David R. Jones, J. Anderson Harp & Thomas Joyce, **Academy of Rail Labor Attorneys**, Washington, DC, April 2005.
6. *"Overview of Traumatic Brain Injuries,"* presented by Dr. William Singer, **Academy of Rail Labor Attorneys**, Washington, DC, April 2005.
7. *"Update of Ergonomic Analysis of the Railroad Workplace,"* presented by Robert O. Andres, Ph.D., **Academy of Rail Labor Attorneys**, Washington, DC., April 2005.
8. *"Locomotive Safety Issues with Cab Seats and Accessories,"* presented by William R. Bogett, Ph.D., **National Association of Railroad Safety Consultants and Investigators**, St. Louis, Mo., May 2002.
9. *"Using Digital Video as a Primary Data Acquisition/Analysis Tool in Railroad Accident Reconstruction,"* presented by Robert Halstead, **National Association of Railroad Safety Consultants and Investigators**, St. Louis, Mo., May 2002.

10. "*Video Graphics and Demonstrative Evidence*," presented by Stuart Nighthenelser, **National Association of Railroad Safety Consultants and Investigators**, St. Louis, Mo., May 2002.
11. "*Operating Rules Compliance and Application/Safe or Safe Enough*," presented by Kevin Dailey, **National Association of Railroad Safety Consultants and Investigators**, St. Louis, Mo., May 2002.
12. "*Forensic Analysis of Train Operations and Train Handling*," presented by Jim Burnett, **National Association of Railroad Safety Consultants and Investigators**, St. Louis, Mo., May 2002.
13. "*Amtrak – The Past, the Present, the Future*," presented by Sheldon Lustig, **National Association of Railroad Safety Consultants and Investigators**, St. Louis, Mo., May 2002.
14. "*Retainer Agreements Make Good Business Sense*," presented by Ronald Dunn, **National Association of Railroad Safety Consultants and Investigators**, St. Louis, Mo., May 2002.
15. "*Applying Information Technology to Railroad Accident Investigation*," presented by Robert Halstead, **National Association of Railroad Safety Consultants and Investigators**, St. Louis, Mo., May 2002.
16. "*Intelligent Video Sensor's to Assess and Reduce Grade Crossing Risk*," presented by Douglas L. Reilly, Ph.D., Nestor Traffic Systems, Inc., **Sixth International Symposium on Railroad-Highway Grade Crossing Research and Safety**, University of Tennessee, Knoxville, TN., October 2000.
17. "*Traffic Separation Studies: Successfully Improving Crossing Safety in North Carolina*," presented by Michael J. Shumsky, Project Engineer, NC DOT Rail Division, **Sixth International Symposium on Railroad-Highway Grade Crossing Research and Safety**, University of Tennessee, Knoxville, TN., October 2000.
18. "*The Effect of Variation in Railroad Warning Time on Traffic Signal Preemption*," presented by Roelof Engelbrecht, Texas Transportation Institute, Texas A&M University, **Sixth International Symposium on Railroad-Highway Grade Crossing Research and Safety**, University of Tennessee, Knoxville, TN., October 2000.
19. "*Second Train Warning Signs for Light Rail*," presented by Vernon G. Harstock, Senior System Engineer, Mass Transit Administration, **Sixth International Symposium on Railroad-Highway Grade Crossing Research and Safety**, University of Tennessee, Knoxville, TN., October 2000.
20. "*Impact of Train Speed on Fatalities and Personal Injuries at Railroad-Highway Grade Crossings*," presented by Kenneth W. Heathington, Ph. D., Applied Research Associates, **Sixth International Symposium on Railroad-Highway Grade Crossing Research and Safety**, University of Tennessee, Knoxville, TN., October 2000.
21. "*Certification of Railroad Operating Employees - What Has Been Accomplished, and What Lies Ahead*," presented by Charles L. Culver, Charles L. Culver & Associates, **Sixth International Symposium on Railroad-Highway Grade Crossing Research and Safety**, University of Tennessee, Knoxville, TN., October 2000.
22. "*States Beware: Shanklin Places Responsibility on You*," presented by Robert L. Pottroff, Myers, Pottroff & Ball, **Sixth International Symposium on Railroad-Highway Grade Crossing Research and Safety**, University of Tennessee, Knoxville, TN., October 2000.
23. "*Level Crossing Protection in the United Kingdom*," presented by Charles Weightman, Station Rise, York, UK., **Sixth International Symposium on Railroad-Highway Grade Crossing Research and Safety**, University of Tennessee, Knoxville, TN., October 2000.
24. "*Sight Distance Obstructions Due to Vegetation Reported in Railroad-Highway Crashes*," presented by Dr. Gary Long, P.E., (University of Florida), **Sixth International Symposium on Railroad-Highway Grade Crossing Research and Safety**, University of Tennessee, Knoxville, TN., October 2000.
25. "*A Study of Humped Grade Crossings in Kansas*," presented by Dr. Eugene R. Russell, Kansas State University, **Sixth International Symposium on Railroad-Highway Grade Crossing Research and Safety**, University of Tennessee, Knoxville, TN., October 2000.
26. "*Sight Distance Issues at Skewed Grade Crossings*," presented by James R. Loumiet, **Sixth International Symposium on Railroad-Highway Grade Crossing Research and Safety**, University of Tennessee, Knoxville, TN., October 2000.
27. "*Measured Sound Output of Locomotive Horns*," presented by David M. Lipscomb, Ph.D., Correct Service, Inc., **Sixth International Symposium on Railroad-Highway Grade Crossing Research and Safety**, University of Tennessee, Knoxville, TN., October 2000.
28. "*Event Recorders - Then and Now*," presented by Jim C. Scott, Scott and Associates, **Sixth International Symposium on Railroad-Highway Grade Crossing Research and Safety**, University of Tennessee, Knoxville, TN., October 2000.
29. "*Guarded Crossings: An In-Depth Analysis of the Most Effective Railroad Crossing Protection*," presented by Larry Farnham, P.E., Correct Service, Inc., **Sixth International Symposium on Railroad-Highway Grade Crossing Research and Safety**, University of Tennessee, Knoxville, TN., October 2000.

30. "Minnesota Passive Train Detection System 2000-2003 Operational Field Test," presented by, **Sixth International Symposium on Railroad-Highway Grade Crossing Research and Safety**, University of Tennessee, Knoxville, TN., October 2000.
31. "Assessment of Railroad-Highway Grade Crossing Issues Across the Nation," presented by Mohammad Qureshi, Asst. Professor, University of Missouri-Rolla, Civil Engineering Dept., **Sixth International Symposium on Railroad-Highway Grade Crossing Research and Safety**, University of Tennessee, Knoxville, TN., October 2000.
32. "Canadian Cooperative Program of Rail-Highway Grade Crossing Research," presented by Sesto Vespa, P.E., Transportation Development Centre, Transport Canada, **Sixth International Symposium on Railroad-Highway Grade Crossing Research and Safety**, University of Tennessee, Knoxville, TN., October 2000.
33. "Summary of Research Supporting the Proposed MUTCD Crossbuck Post Reflectorization," presented by Dr. Eugene R. Russell, Kansas State University, **Sixth International Symposium on Railroad-Highway Grade Crossing Research and Safety**, University of Tennessee, Knoxville, TN., October 2000.
34. "Standards for Highway-Rail Intersections: Panel Session," presentors: Richard J. Weiland, President Weiland Consulting Co., Thomas P. Woll, ITS Program Mgr, Federal Railroad Admin., James Cheeks, Standards Development Mgr, Institute of Transportation Engineers, Washington, DC, Thomas Urbanik, Associate Director, Transportation Operations, Texas Transportation Institute, (representing American Assoc. of Highway & Traffic Officials), William A. Petit, VP Technology, Safetran Systems and Howard Moody, Director, Systems Engineering, Association of American Railroads, **Sixth International Symposium on Railroad-Highway Grade Crossing Research and Safety**, University of Tennessee, Knoxville, TN., October 2000.
35. "Application of Traffic Conflict Technique on Railroad Crossings in Egypt," presented by Dr. Mona H. Abd-Allah, Public Works Dept., Faculty of Engineering, Ain Shams University, Cairo, Egypt, **Sixth International Symposium on Railroad-Highway Grade Crossing Research and Safety**, University of Tennessee, Knoxville, TN, October 2000.
36. "Defining Effective Photo Enforcement as a Supplementary Safety Measure for Quiet Zones," presented by James E. Hooper, Sakonnet Technology Group, **Sixth International Symposium on Railroad-Highway Grade Crossing Research and Safety**, University of Tennessee, Knoxville, TN, October 2000.
37. "Federal Assistance Impact on Railroad-Highway Grade Crossings," presented by Mary M. Hensley, President, Hensley Engineering and Research Services, **Sixth International Symposium on Railroad-Highway Grade Crossing Research and Safety**, University of Tennessee, Knoxville, TN., October 2000.
38. "Whistle Bans and Quiet Zones," presented by Ronald E. Ries, Transportation Specialist, FRA, **American Short Line and Regional Railroad Association Central Region Meeting**, Branson, MO., May 2000.
39. "Mergers, Infrastructure, and the Political Landscape," presented by Alice C. Saylor, V.P. & Gen. Counsel, ASLRRA, **American Short Line and Regional Railroad Association Central Region Meeting**, Branson, MO., May 2000.
40. "E-Commerce and Steelroads.Com: Making Tracks for the Information Superhighway," presented by Stephen Crowley, Mgr. -eBusiness Marketing GE Transportation Systems, Treadwell Davison, Dir.-Business Development, Railinc, Robin Ringwald, Mgr.-EDI, Union Pacific Railroad, Michael J. Klass, GM-Marketing & Sales, I & M Rail Link, **American Short Line and Regional Railroad Association Central Region Meeting**, Branson, MO., May 2000.
41. "Capital Needs Assessment - 286 Technical Report," presented by Jim Blaze, Dir.-Strategic Planning & Special Studies Zeta-Tech Assoc., Inc., **American Short Line and Regional Railroad Association Central Region Meeting**, Branson, MO., May 2000.
42. "State Funding Programs - What's Available?," presented by John W. Maddox, Program Mgr., Office of Rail Affairs, Kansas DOT, Peggy Baer, Rail Rehab. Mgr., Iowa DOT, Joe R. Kyle, Mgr. - Office of Rail Programs, Oklahoma DOT, **American Short Line and Regional Railroad Association Central Region Meeting**, Branson, MO., May 2000.
43. "Canac Training Program," presented by Paul Mertes, V.P.-Training & Technology Delivery, CANAC, Inc., Peter V. Johnson, V.P.-National Sales, CANAC, Inc., **American Short Line and Regional Railroad Association Central Region Meeting**, Branson, MO., May 2000.
44. "Motion Sensors & Predictors at Highway-Rail Grade Crossings," presented by Robert Halstead, **National Association of Railroad Safety Consultants and Investigators**, St. Louis, MO., May 2000.
45. "Train Crew Unsafe Work Cycles," presented by Colon Fulk, **National Association of Railroad Safety Consultants and Investigators**, St. Louis, MO., May 2000.
46. "Passive Crossings & Pedestrian Accidents," presented by Ronald Eck, Ph.D., **National Association of Railroad Safety Consultants and Investigators**, St. Louis, MO., May 2000.

47. "*Mega Mergers and their Fallout Problems*," presented by Sheldon Lustig, **National Association of Railroad Safety Consultants and Investigators**, St. Louis, MO., May 2000.
48. "*Shanklin Case - Supreme Court Review*," presented by Peter Burcat, **National Association of Railroad Safety Consultants and Investigators**, St. Louis, MO., May 2000.
49. "*Railroad Operations*," presented by Charles Culver, **National Association of Railroad Safety Consultants and Investigators**, Atlanta, GA., May 1999.
50. "*G. E. Locomotives in the Railroad Industry*," presented by Thomas Johnson, P.E., **National Association of Railroad Safety Consultants and Investigators**, Atlanta, GA., May 1999.
51. "*Hazardous Materials*," presented by Sheldon Lustig, **National Association of Railroad Safety Consultants and Investigators**, Atlanta, GA., May 1999.
52. "*New Ideas in Signal Systems*," presented by Richard Mather, **National Association of Railroad Safety Consultants and Investigators**, Atlanta, GA., May 1999.
53. "*Passive Grade Crossings*," presented by Ronald Eck, Ph.D., **National Association of Railroad Safety Consultants and Investigators**, Atlanta, GA., May 1999.
54. "*Testimony of the Expert Witness*," presented by Gerald Bonifield, Esq., **National Association of Railroad Safety Consultants and Investigators**, Atlanta, GA., May 1999.
55. "*New Decisions Effecting the Expert Witness*," presented by Lewis Laska, **National Association of Railroad Safety Consultants and Investigators**, Atlanta, GA., May 1999.
56. "*Conrail Split*," presented by Sheldon Lustig, **National Association of Railroad Safety Consultants and Investigators**, Atlanta, GA, May 1999.
57. "*Forces Experienced by Crew Members While Coupling Railcars*," presented by Stuart B. Nighthenelser, **National Association of Railroad Safety Consultants and Investigators**, Nashville, TN., May 1997.
58. "*Duties of a FELA Investigator*," presented by Stephen Chamberlain, **National Association of Railroad Safety Consultants and Investigators**, Nashville, TN., May 1997.
59. "*Recent Grade Crossing Safety Initiatives*," presented by Ronald W. Eck, Ph.D., **National Association of Railroad Safety Consultants and Investigators**, Nashville, TN., May 1997.
60. "*Safety on Locomotive Walkways and Ladders*," presented by William R. Bogett, Ph.D., **National Association of Railroad Safety Consultants and Investigators**, Nashville, TN., May 1997.
61. "*Locomotive and Train Air Brake Systems*," presented by James R. Loumiet, **National Association of Railroad Safety Consultants and Investigators**, Nashville, TN., May 1997.
62. "*Railroad Highway Grade Crossing Interconnecting Signals*," presented by Richard A. Mathers, **National Association of Railroad Safety Consultants and Investigators**, Nashville, TN., May 1997.
63. "*Computer Modeling of Railroad Locomotive Headlight Illumination Patterns*," presented by James S. Sobek, P.E., **National Assoc. of Railroad Safety Consultants and Investigators**, Nashville, TN, May 1997.
64. "*Engine Emission in Locomotive Cabs*," presented by Dr. William Bogett, **National Association of Railroad Safety Consultants and Investigators**, Nashville, TN., May 1996.
65. "*Duties of the Parties in the Common Carriage of Goods*," presented by Charles Penrod, **National Association of Railroad Safety Consultants and Investigators**, Nashville, TN., May 1996.
66. "*Analysis of Railroad Trestle and Right of Way Accidents*," presented by William Wilson, Esq., **National Association of Railroad Safety Consultants and Investigators**, Nashville, TN., May 1996.
67. "*Freight Train Slack Action Effects Analysis*," presented by James R. Loumiet, **National Association of Railroad Safety Consultants and Investigators**, Nashville, TN., May 1996.
68. "*Update of the U.S. DOT Grade Crossing Task Force*," presented by Dr. Ronald Eck, **National Association of Railroad Safety Consultants and Investigators**, Nashville, TN., May 1996.
69. "*Unique Court Cases*," presented by Lewis Laska, Esq., **Nat'l. Association of Railroad Safety Consultants and Investigators**, Nashville, TN., May 1996.
70. "*Discussion of Actual Train-Auto Accident with Action Films*," presented by James Sobek, P.E., **National Association of Railroad Safety Consultants and Investigators**, Nashville, TN., May 1996.
71. "*Visual Consideration of the Vehicle Driver and Locomotive Engineer*," presented by Dr. Bernard Abrams, **National Association. of Railroad Safety Consultants and Investigators**, Nashville, TN., May 1996.

72. "*Federal and State Rules Relating to Expert Witnesses*," presented by William Jungbauer, Esq., **National Association of Railroad Safety Consultants and Investigators**, Dearborn, MI., May 1995.
73. "*Audible Warning Signals*," presented by Rudolf Mortimer, **National Association of Railroad Safety Consultants and Investigators**, Dearborn, MI., May 1995.
74. "*Safety Tact for Bridges with Track*," presented by William Gene Corley, **National Association of Railroad Safety Consultants and Investigators**, Dearborn, MI., May 1995.
75. "*Seats and Safety in Locomotive Cabs*," presented by Dr. William Bogett, **National Association of Railroad Safety Consultants and Investigators**, Dearborn, MI., May 1995.
76. "*Railroad Signal Systems*," presented by Paul Arthur Gouty, **National Association of Railroad Safety Consultants and Investigators**, Dearborn, MI., May 1995.
77. "*Geometry of Rail-Highway Grade Crossings*," presented by Dr. Ronald Eck, **National Association of Railroad Safety Consultants and Investigators**, Dearborn, MI., May 1995.
78. "*Visibility and Discernibility at Railroad Crossings*," presented by Dr. Bernard Abrams, **National Association of Railroad Safety Consultants and Investigators**, Nashville, TN., May 1994.
79. "*Rights of Railroad Employees When Filing Claims*," presented by Donald Leiderman, **National Association of Railroad Safety Consultants and Investigators**, Nashville, TN., May 1994.
80. "*Railroad Retirement Rights and Benefits*," presented by James Reynolds, **National Association of Railroad Safety Consultants and Investigators**, Nashville, TN, May 1994.
81. "*Evolution of Locomotive Cabs from a Crew Safety Perspective*," presented by Dr. William Bogett, **National Association of Railroad Safety Consultants and Investigators**, Nashville, TN., May 1994.
82. "*Locomotive Maintenance and Safety*," presented by William Mason, **National Association of Railroad Safety Consultants and Investigators**, Nashville, TN., May 1994.
83. "*Locomotive Speed Tape Analysis*," presented by James R. Loumiet, **National Association of Railroad Safety Consultants and Investigators**, Nashville, TN., May 1994.
84. "*Expert Witness Preparation*," presented by Dr. Ronald Eck, **National Association of Railroad Safety Consultants and Investigators**, Nashville, TN., May 1994.
85. "*Locomotive Design and Safety On and Around Equipment*," presented by Dr. William Bogett, **National Association of Railroad Safety Consultants and Investigators**, Nashville, TN., May 1993.
86. "*Alternative Methods of Train Speed Reconstruction*," presented by James R. Loumiet, **National Association of Railroad Safety Consultants and Investigators**, Nashville, TN., May 1993.
87. "*Tracks, Structures, Derailment Causes and Hi-Rail Vehicle Requirements*," presented by Guy Western, **National Assoc. of Railroad Safety Consultants and Investigators**, Nashville, TN., May 1993.
88. "*Safety and Accident Analysis*," presented by Dr. Dev Raheja, Ph.D., **National Association of Railroad Safety Consultants and Investigators**, Nashville, TN., May 1993.
89. "*Large Commercial Vehicles at Rail-Highway Grade Crossings*," presented by Ronald W. Eck, P.E., Ph.D., **National Association of Railroad Safety Consultants and Investigators**, Nashville, TN., May 1993.
90. "*Sight Distance Requirements at Rail-Highway Grade Crossings*," presented by John Tidwell, **National Association of Railroad Safety Consultants and Investigators**, Nashville, TN., May 1993.
91. "*Trestle Accidents and Railroad Company Positions in FELA Litigation*," presented by William Wilson, Esq., **National Association of Railroad Safety Consultants and Investigators**, Nashville, TN., May 1993.
92. "*Railroad Insurance Programs*," presented by Donald Leiderman, **National Association of Railroad Safety Consultants and Investigators**, Nashville, TN., May 1993.
93. "*The Art of Investigating Grade Crossing and FELA Cases*," presented by James Reynolds, **National Association of Railroad Safety Consultants and Investigators**, Nashville, TN., May 1992.
94. "*Forensic Analysis of Train Brakes in Crossing Collisions*," presented by James R. Loumiet, **National Association of Railroad Safety Consultants and Investigators**, Nashville, TN., May 1992.
95. "*FELA Noise and Hearing Loss*," presented by Lewis Laska, **National Association of Railroad Safety Consultants and Investigators**, Nashville, TN., May 1992.
96. "*Fifty Sources of Standards, Practices, Procedures and Information for the Railroad Safety Consultant*," presented by Denis Bergquist, **National Association of Railroad Safety Consultants and Investigators**, Nashville, TN., May 1992.

Exhibit 3

Union Pacific Rules

Includes Updates as of February 27, 2012

- [General Code of Operating Rules](#)
- [Train Dispatcher Rules](#)
- [Union Pacific Railroad - Air Brake and Train Handling Rules](#)
- [Safety Rules](#)
- [System Special Instructions](#)
- [Instructions for Handling Hazardous Materials](#)
- [System General Orders](#)

[UP Handheld home page](#)

	<ol style="list-style-type: none"> 8. Prime the engine as indicated on the badge plate. 9. Crank the engine until the engine starts, but not longer than 20 seconds for EMD locomotives and 45 seconds for GE locomotives. Allow two minutes between cranking attempts. 10. After starting, place switches or breakers for air conditioning, lights, heaters, refrigerator, and other accessories in the ON positions, as appropriate. 11. Check that the air brake system is charged and operative before releasing the hand brake.
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31.8.6: Weak Batteries

31.8.6	<p>Weak Batteries</p> <p>When a weak battery condition is determined by the Mechanical Department, do the following:</p> <ul style="list-style-type: none"> • Tag locomotives with weak batteries to prevent shutdown until the condition is corrected. • Report the condition on engineer electronic inspection report. • Report to the Locomotive Help Desk if discovered enroute. <p>Locomotives identified with such tags or other identified mechanical problems that would prevent starting where repair facilities are not available may be left running for no more than seven calendar days.</p>
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31.8.7: Locomotive Fuel Conservation and TPA Compliance

31.8.7	<p>Locomotive Fuel Conservation and TPA Compliance</p>
Reference Rule	<p>A. Locomotive Shutdown Shut down locomotive when:</p>
SSI Item 5-C	<ul style="list-style-type: none"> • Left standing unattended for 15 minutes or longer. • The trailing locomotive(s) in lead consist are isolated.
Glossary	<p>Locomotive should be left running when:</p> <ul style="list-style-type: none"> • The temperature is expected to drop below 35 degrees F in the next 12 hours. • Necessary to maintain the air supply, one locomotive may be left running. • Distributed power locomotives are actively linked.

Exhibit 4

BNSF Railway Safety Vision

We believe every accident or injury is preventable. Our vision is that BNSF Railway will operate free of accidents and injuries. BNSF Railway will achieve this vision through:

A culture that makes safety our highest priority and provides continuous self-examination as to the effectiveness of our safety process and performance...

A work environment, including the resources and tools, that is safe and accident-free where all known hazards will be eliminated or safe-guarded...

Work practices and training for all employees that make safety essential to the tasks we perform...

An empowered work force, including all employees, that takes responsibility for personal safety, the safety of fellow employees, and the communities in which we serve.

This version contains the following revised, deleted or added pages:

March 1, 2011: 9, 10, 53, 54, 113, 114.

September 1, 2011: 43, 44, 49, 50.

November 1, 2011: 11, 12.

December 1, 2011: 15, 16, 63, 64, 65, 66, 67, 68, 123, 124.

April 1, 2012: 111, 112.

August 1, 2012: 23, 24.

December 1, 2012: 115, 116, 116a (added), 116b (added).

February 1, 2013: 3, 4, 79, 80.

May 1, 2013: Title page, 2, 125, 126.



Air Brake and Train Handling Rules

No. 5

In Effect at 0001
Central, Mountain and Pacific
Continental Time

April 7, 2010
(Including revisions through
May 1, 2013)

When isolating or shutting down a locomotive en route for fuel conservation purposes, the following will apply:

1. Temperature 40 degrees F or above - locomotive must be shut down; do not drain.

Note: Due to modifications made to the automated engine start/stop systems, ALL locomotives equipped with AESS are to be ISOLATED ONLY - DO NOT shut down manually.

2. Temperature below 40 degrees F - locomotive must be isolated; do not shut down.
3. Temperature below 0 degrees F - locomotives must be isolated in Winter/Isolate position, if equipped.

Exceptions:

- Locomotives not equipped with freeze protection equipment - must not be isolated if temperature is below 32 degrees F. (Locomotives not equipped with freeze protection may be determined by the absence of a "Water Drain" circuit breaker in the circuit breaker panel or by referencing the table above.)
- Distributed power lead, controlling unit, or all locomotives in remote consist(s) must not be manually shut down for fuel conservation purposes. If necessary, DP remotes must be "Isolated" by placing DP remote(s) in remote mode "IDLE". This prevents all throttle activity by the remote consist but allows for continued air brake function by the remote consist. Distributed power "Train Check" must continue to be performed, as required.

106.3 Shut Down Requirement for Locomotives Not Being Utilized

At ALL points when locomotive(s) will not be utilized for one hour or more, all locomotives except locomotive maintaining a train's air brake pipe system and occupied locomotives kept running to maintain air conditioning must be shut down when current and expected ambient temperature is 40 degrees F or above. When in doubt as to the temperature or the length of time locomotive(s) will not be used, contact the train dispatcher or local supervisor.

Exception: Automatic Engine Start/Stop Systems - Locomotives equipped with automatic engine start/stop systems are identified by labels and instructions affixed inside the locomotive cab and at the engine start/stop station. The AESS system on a single locomotive within a locomotive consist may be utilized to maintain a train's air brake system as outlined above since they are designed to automatically shut down and restart as conditions require. These conditions include maintaining necessary main reservoir and brake pipe pressures. All locomotives not equipped with AESS within the consist must be shut down manually.

A green "Enabled" light is positioned on the engineers control stand on some automatic start/stop systems referred to as "Smart Start". Small warning horns or bells sound inside the cab and outside the locomotive before an automatic shut down or restart occurs. Auto start/stop equipped locomotives will automatically shut down when conditions permit.

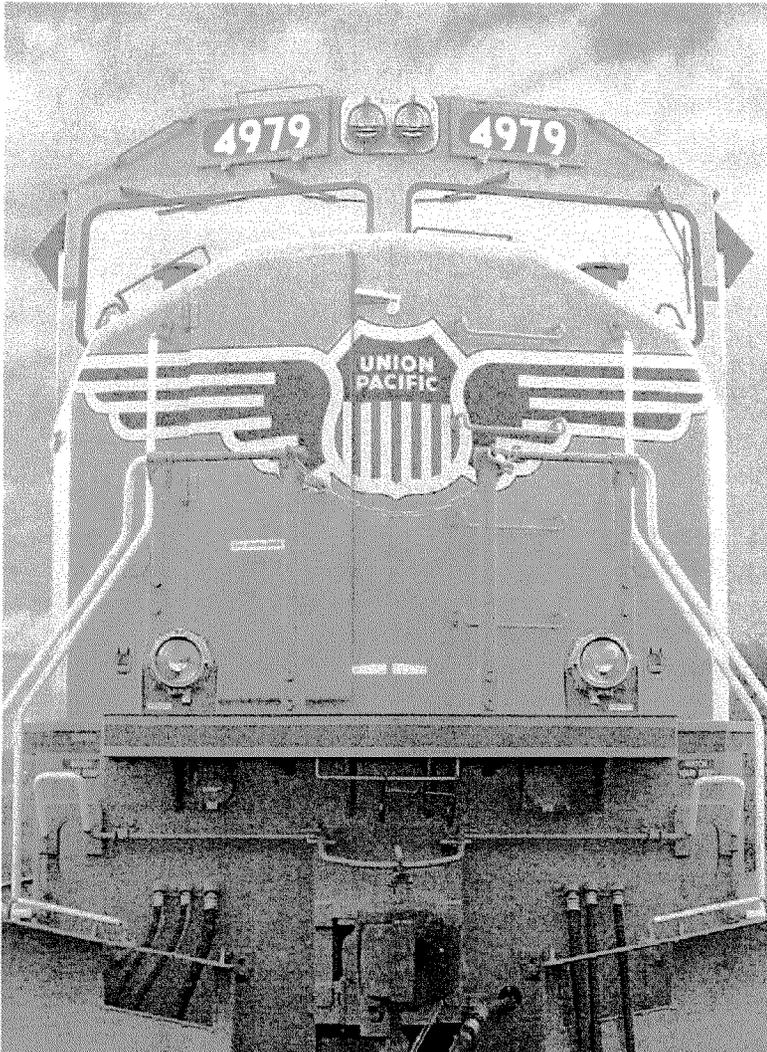
Do not defeat or disable AESS/Smart Start systems on locomotives equipped with this feature. Using the AESS "override" feature on equipped locomotives is not considered disabling or defeating the AESS system. If an AESS/Smart Start system becomes defective en route, you may disable the system provided mechanical desk is notified in order to record a defect. A locomotive defect tag must be placed on the isolation switch of the affected locomotive, indicating a defect.

Note: Lead locomotives without an "override" feature may be disabled for the purposes of keeping air conditioning or heating operable while occupied.

Exhibit 5

THE LOWDOWN ON THE SHUTDOWN.

BUILDING AMERICA®



Shutting Down Idling Locomotives Benefits Everyone.

Far more than just a cost-saving initiative, shutting down locomotives reduces diesel emissions and benefits our environment, our communities, your family — and YOU!

Air pollution is a public health concern, and the noise caused by idling locomotives can irritate community members.

Sometimes locomotives are kept idling due to a variety of myths. You've probably heard most of them: *It won't restart. The train will be late. It takes too long. We'll lose our air conditioning. It's not my responsibility.*

Forget the myths. Shutting down idling locomotives is everyone's responsibility, regardless of craft. Help out the environment and be a good neighbor — shut it down!

When Should I Shut It Down?

GCOR 32.20:

Shut down trailing diesel engines to be left standing **unattended for 1 hour or longer**. However, the lead locomotive of the consist may be left running if needed to maintain the air supply on the train. It is not necessary to shut down DPU locomotives unless instructed by the train dispatcher or local supervisors.

Other locomotives must also be shut down except when authorized by local supervisors or special instructions to be left running. The following guidelines apply:

- Keep the lead engine idling to maintain air pressure if coupled to a train and not equipped with AESS.
- Shut down trailing locomotives if the idle time is expected to exceed one hour. If you don't know, shut it down.
- Shut down all light locomotives if outside air temperature is 40 degrees or more.
- Do not manually shut down locomotives with AESS or SmartStart if the system is enabled. (Indicator light shows green on EMD AESS and SmartStart. GE AESS displays "ready.")
- Tag any locomotives with weak batteries or another condition that prevents starting.
- Local managers do not have the authority to allow diesel engines to idle.
- Report any locomotive with disabled AESS or SmartStart to the Mechanical Desk and the Engine Defect (ED) reporting system.

SMARTSTART (Low-Horsepower Locomotive) †

Auto Start SHUTDOWN	
Auto-Start-Enabled Indicator	On position, "green"
Locomotive Reverser	Centered
Independent Brakes	Applied
Throttle Position	Idle
Reverser Position	Centered
Warning Device	Siren turns "on" for about 20 seconds. Auto Start indicator will flash green & red. Once shut down, sirens will operate in "chirp" mode.
Maintenance	Depress the EFCO switch prior to performing any maintenance.
Once the EFCO/STOP button or one of the locomotive's protective systems is shut down, Auto Start is disabled. Manual re-start must be performed to start the locomotive.	

Auto Start RE-START	
Auto Start will not start a locomotive that it did not shut down.	
Auto-Start-Enabled Indicator	On position, "green"
Throttle Position	Idle
Warning Device	Siren blares when the system begins starting up the locomotive.

Triggers	
Reverser Position	Move to forward or reverse.
Independent Brakes	Released
If the locomotive fails to start after 20 seconds, Auto Start stops. Following a 2-minute cooldown, the sequence begins again. Auto Start attempts to re-start the locomotive three times.	
When train is ready to depart, move reverser to appropriate direction for 90 seconds before releasing brakes.	

† The directions above apply to all locomotives retrofitted with SmartStart equipment, except CANAC RCL models.

Exhibit 6

BNSF Railway Safety Vision

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A culture that makes safety our highest priority and provides continuous self-examination as to the effectiveness of our safety process and performance...

A work environment, including the resources and tools, that is safe and accident-free where all known hazards will be eliminated or safe-guarded...

Work practices and training for all employees that make safety essential to the tasks we perform...

An empowered work force, including all employees, that takes responsibility for personal safety, the safety of fellow employees, and the communities in which we serve.

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May 1, 2013: Title page, 2, 125, 126.



Air Brake and Train Handling Rules

No. 5

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104.14 Determining Number of Hand Brakes

The number of hand brakes depends on:

- Grade and adhesion.
- Number of loaded and empty cars.
- Weather conditions (wind and temperature)

Use the following to determine the minimum number of hand brakes to apply, when the number required is unknown and/or when testing of the handbrakes by releasing the air brakes is not possible.

Guideline Chart When Unable to Verify Required Hand Brakes by Release of Air Brakes													
Number of Applied Hand Brakes Required													
	Grade (%)												
Tons	0	0.25	0.50	0.75	1.00	1.25	1.50	1.75	2.00	2.25	2.50	2.75	3.00+
<1,000	2	2	2	2	3	3	4	4	5	6	7	7	9
1,000+	2	3	3	3	5	6	8	8	10	12	13	14	15
2,000+	2	3	5	5	6	8	9	11	12	14	15	17	20
3,000+	3	5	5	7	8	10	12	14	16	18	20	23	30
4,000+	4	5	5	8	10	13	15	18	20	23	25	28	35
5,000+	5	6	7	9	12	15	18	21	24	27	30	33	39
6,000+	5	7	8	11	14	18	21	25	28	32	35	39	46
7,000+	5	7	9	13	16	21	24	29	32	37	40	45	53
8,000+	5	8	10	14	18	23	27	32	36	41	45	50	60
9,000+	5	9	12	15	20	25	30	35	40	45	50	55	65
10,000+	6	10	13	17	22	28	33	39	44	50	55	60	100%
11,000+	6	11	15	18	24	30	36	42	48	54	60	66	100%
12,000+	7	14	16	20	26	33	39	46	52	59	65	72	100%
13,000+	8	15	17	22	28	35	42	49	56	63	70	100%	100%
14,000+	8	15	20	23	30	38	45	53	60	68	75	100%	100%
15,000+	9	16	22	24	32	40	48	56	64	72	80	100%	100%
16,000+	10	18	24	26	34	43	51	60	68	77	85	100%	100%
17,000+	10	20	26	28	36	45	54	63	72	81	90	100%	100%

Exhibit 1

Home » Briefing Room » Justice News

JUSTICE NEWS**Department of Justice**

Office of Public Affairs

FOR IMMEDIATE RELEASE

Wednesday, August 4, 2010

Massachusetts Bay Transportation Authority to Spend Millions to Reduce Commuter Train Emissions in Clean Air Act Settlement

WASHINGTON – In response to a federal enforcement action for excessive train engine idling, the Massachusetts Bay Transportation Authority (MBTA) and the Massachusetts Bay Commuter Railroad Company (MBCR) will spend more than \$2 million to reduce diesel locomotive emissions throughout the MBTA's commuter rail system, the Justice Department and Environmental Protection Agency (EPA) announced today. Under a consent decree lodged in federal court, MBTA and MBCR will spend over \$1 million on anti-idling equipment at all end-of-line stations and maintenance facilities, and will spend another \$1 million on ultra-clean diesel fuel for all trains in the commuter rail system for two years.

These emission-reducing measures are the result of a federal enforcement action brought by the Justice Department on behalf of EPA in response to MBTA's and MBCR's excessive locomotive idling at the Widett Circle layover facility in South Boston and the Greenbush line station in Scituate, Mass. Neighboring residents have complained of excessive train idling at both locations.

To settle the enforcement action, MBTA and MBCR will:

- Install or upgrade electric plug-in stations as anti-idling equipment to supply all commuter locomotives with electric auxiliary power to prevent excess idling during train layovers;
- Switch to cleaner burning, ultra-low sulfur diesel fuel for all trains on the MBTA's commuter rail lines for a two year period at an estimated cost of \$1 million;
- Install new, less polluting auxiliary engines on fourteen commuter locomotives by no later than December 2012; and
- Pay a \$225,000 fine.

The anti-idling measures, clean diesel fuel switch and new auxiliary engines required by the federal settlement will have significant clean air benefits. For example, a reduction in commuter locomotive idling by even one hour per day per locomotive, together with the fuel switch and new engines, could result in yearly carbon dioxide emission reductions of an estimated 800 tons, nitrogen oxides reductions of nearly 170 tons, carbon monoxide reductions of about 80 tons, particulate reductions of 23 tons, and sulfur dioxide reductions of 1-2 tons.

MBTA owns 80 commuter locomotives used on 13 commuter rail routes in Eastern Massachusetts. Since 2003, MBCR has managed and operated the commuter train system for the MBTA. The system includes 14 layover facilities where the locomotives and passenger cars are parked and serviced between runs. Electric plug-in stations at these facilities supply the trains with electric power for lights and ventilation. If a plug-in is not available, a train on layover idles its auxiliary diesel engine to supply any needed electric power.

Under today's settlement, which must be approved by the court, commuter train layovers will only be allowed at locations where there are sufficient electric plug-in stations for all trains.

The Massachusetts locomotive idling regulation, a federally-enforceable state regulation, prohibits all unnecessary diesel locomotive idling for more than 30 minutes. According to a 2008 notice of violation issued by

EPA, MBTA and MBCR committed 33 violations of this regulation at Widett Circle and Greenbush in three months. At Widett, the average idling time during the violations was just under four hours (234 minutes).

“This precedent-setting, multi-million dollar settlement for train idling is appropriate in light of the defendants’ conduct,” said Ignacia S. Moreno, Assistant Attorney General for the Justice Department’s Environment and Natural Resources Division. “The settlement will provide immediate and lasting environmental benefits to the residents of Eastern Massachusetts, particularly those in environmental justice communities.”

“It is imperative that anti-idling laws are followed, given the proximity of these layover facilities to densely-populated communities and environmental justice neighborhoods,” said Curt Spalding, regional administrator of EPA’s New England Office. “Diesel pollution can be very harmful, especially to sensitive populations such as the young, elderly and people who suffer from asthma.”

Diesel emissions contribute to a number of serious air pollution problems such as smog, acid rain and increased carbon concentrations in the atmosphere. Diesel exhaust contains fine particles that can cause lung damage and aggravate respiratory conditions, such as asthma and bronchitis. Based upon human and laboratory studies, there is also considerable evidence that diesel exhaust is a likely carcinogen.

Since 2002, EPA has brought more than a dozen federal enforcement cases to stop diesel engine idling violations in Mass., Conn. and R.I. Most of the cases have involved diesel truck and bus idling, including a judicial settlement announced in July 2010 against National Car Rental for shuttle bus idling at two airports. Only Massachusetts and Rhode Island have federally-enforceable locomotive idling regulations, and today’s action marks the first time EPA and DOJ have sued a railroad for excessive idling violations.

The consent decree, lodged in the U.S. District Court, will be subject to a 30-day public comment period and approval by the federal court. Once it is published in the Federal Register, a copy of the consent decree and instructions on how to comment will be available on the Justice Department Web site at www.usdoj.gov/enrd/Consent_Decrees.html.

Diesel exhaust and anti-idling guidelines (www.epa.gov/ne/eco/diesel)

10-896

Environment and Natural Resources Division

Exhibit 2

U.S. EPA FACT SHEET

CLEAN AIR ACT SETTLEMENT WITH THE MASSACHUSETTS BAY TRANSPORTATION AUTHORITY (MBTA) AND MASSACHUSETTS BAY COMMUTER RAILROAD COMPANY (MBCR) FOR COMMUTER TRAIN IDLING VIOLATIONS, 8/4/10

Summary. In response to a federal Clean Air Act (CAA) enforcement action for excessive train engine idling, the Massachusetts Bay Transportation Authority (MBTA) and the Massachusetts Bay Commuter Railroad Company (MBCR) will spend over \$2 million to reduce diesel locomotive emissions throughout the MBTA's commuter rail system. The MBTA and MBCR will also pay a \$225,000 fine. The U.S. Environmental Protection Agency (EPA) and the U.S. Department of Justice (DOJ) negotiated with the two defendants to settle the CAA enforcement case with a judicial consent decree, which was lodged in federal court on August 4, 2010.

MBTA and MBCR. The MBTA, a subdivision within Massachusetts state government, is the fifth largest mass transit system in the nation, serving 175 cities and towns in Eastern Massachusetts with buses, subways, and commuter railroads. The MBTA owns 80 commuter locomotives, which are used on thirteen commuter rail routes. The MBCR, a private corporation, has managed and operated the commuter rail system under contract with MBTA since 2003.

Train Layover Facilities. The MBTA's commuter rail system includes fourteen "layover facilities," where the locomotives and passenger rail cars are parked and serviced between runs. Many of these facilities are at end-of-line commuter rail stations (e.g., Worcester, Greenbush and Rockport), but there are also two major service/maintenance facilities located near North and South Stations. The Commuter Rail Maintenance Facility is located in Somerville near North Station, and the Widett Circle Commuter Rail Service and Inspection Facility (Widett Circle facility), and various nearby outdoor tracks, is located in South Boston near South Station.

Electric Plug-Ins. The fourteen layover facilities contain varying numbers of electric-powered plug-in stations. These plug-in stations are designed to supply the trains with electric power for lights, ventilation and temperature control. If a plug-in station is not available, a train on layover idles its auxiliary diesel engine to supply any needed electric power, for example to light the train for night cleaning. Many of the train idling violations cited at the Widett Circle facility were due to insufficient plug-ins there.

Law and Violations. The Massachusetts locomotive idling regulation is a federally-enforceable state regulation that prohibits all unnecessary foreseeable diesel locomotive idling for a continuous period longer than 30 minutes, except when idling during train servicing is necessary for the train's proper repair. For example, the Federal Railroad Administration requires that safety checks be performed on locomotives and their train sets; some of these safety checks require engine idling and can take up to an hour to perform.

*** MORE ***

In response to citizen complaints regarding excessive train idling at the Widett Circle facility and Greenbush rail station, EPA required the MBTA and MBCR to provide layover records from the Widett and Greenbush facilities. These records showed numerous instances of excessive train idling in January through March 2008. EPA issued the MBTA and MBCR a formal written notice for these excessive idling violations. EPA and DOJ subsequently began case settlement negotiations with the MBTA and MBCR, which resulted in today's settlement. The settlement must still be approved by the federal district court.

Settlement. To settle the enforcement action, the MBTA and MBCR will do the following:

- Install or upgrade electric plug-ins at the MBTA's layover stations to ensure that there are sufficient plug-ins to supply electric power to all commuter locomotives that lay over at all stations at all times, in order to prevent excessive idling during train layovers, at a cost of over \$1 million;
- Switch to cleaner burning, ultra-low sulfur diesel fuel for all trains running on the MBTA's commuter rail lines until June 2012, benefitting train riders and the communities through which the trains pass, at an estimated cost of \$1 million (after June 2012, MBTA/MBCR will be required to keep using this ultra-clean fuel by federal regulation);
- Install new, less polluting auxiliary diesel engines on fourteen commuter locomotives by no later than December 2012; and
- Pay a \$225,000 fine.

Additional Settlement Terms. At the Widett Circle facility, a temporary generator was installed in December 2009 in order to bring three temporary plug-ins to the South Hampton Front Yard (Front Yard), a group of outdoor railroad tracks south of the facility. Under the settlement, commuter trains are allowed to lay over at the Front Yard only as long as there are sufficient plug-ins there. Separately, by the end of September, one additional plug-in (capable of supplying electric power to two trains) will be installed outside the Widett facility's maintenance/storage building. Plug-ins will also be modified and upgraded at the South Hampton Main Yard (Big Yard), another set of outdoor tracks south of the facility. As with the Front Yard, train layovers are only allowed at the Big Yard to the extent that there are sufficient plug-ins there.

To ensure continued compliance with the Massachusetts locomotive idling regulation, the MBTA and MBCR must provide quarterly reports to EPA listing any instances where a diesel locomotive idled unnecessarily for more than 30 minutes. MBTA and MBCR are subject to stipulated penalties of up to \$5,000 for each train idling violation.

*** MORE ***

Clean Air Benefits. About 50,000 people live within a half mile of the MBTA's fourteen layover facilities, and almost 1.5 million more live within one half mile of the MBTA's railway stations and tracks. All these residents, together with the 70,000-plus persons who ride the MBTA's commuter trains each day, will benefit from the air pollution reductions contained in today's settlement. For example, if the MBTA's train fleet cut diesel engine idling by one hour per train per day, this action, together with the clean diesel fuel switch and the auxiliary engine replacements, could result in estimated yearly nitrogen oxides emission reductions of about 167 tons, carbon monoxide reductions of 82 tons, particulate reductions of 23 tons, and sulfur dioxide reductions of 1-2 tons. Carbon dioxide would also be reduced by an estimated 800 tons/year.

Diesel Health Risks. Idling diesel locomotives emit many air pollutants, including nitrogen oxides and volatile organic compounds (both of which contribute to ozone smog), carbon dioxide (a greenhouse gas that contributes to climate change), carbon monoxide, sulfur dioxide and particulate matter. The fine particles in diesel exhaust can cause lung damage, and can aggravate respiratory conditions such as asthma and bronchitis. There is also considerable evidence, based on human and laboratory studies, that diesel exhaust is a likely human carcinogen. Children, the elderly and persons with existing heart or lung disease are more sensitive to diesel exhaust and are subject to greater health risks.

Environmental Justice. The Widett Circle facility is located in densely populated South Boston and has nearby environmental justice neighborhoods – communities with substantial numbers of low-income and/or minority residents. Many of the MBTA's other layover facilities and stations, e.g., the Worcester, Fitchburg and Pawtucket layover facilities, and the Lowell, Framingham and Providence rail stations, are located in or near environmental justice neighborhoods. Persons living in these neighborhoods are often subject to multiple pollution sources and can be at greater risk from cumulative health impacts.

Exhibit 3

**MEMORANDUM OF UNDERSTANDING ON
ENVIRONMENTAL JUSTICE AND EXECUTIVE ORDER 12898**

WHEREAS, on February 11, 1994, the President signed Executive Order 12898, “Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations” (“Executive Order 12898” or “Order”), and issued an accompanying Presidential Memorandum (references to this Order herein also generally include this Memorandum), and

WHEREAS, Executive Order 12898 applies to the following agencies: the Department of Agriculture, Department of Commerce, Department of Defense, Department of Energy, Department of Health and Human Services, Department of Housing and Urban Development, Department of the Interior, Department of Justice, Department of Labor, Department of Transportation, and the Environmental Protection Agency. The Order applies to the following offices in the Executive Office of the President: Office of Management and Budget, Office of Science and Technology Policy, Office of the Deputy Assistant to the President for Environmental Policy, Office of the Assistant to the President for Domestic Policy, National Economic Council, and Council of Economic Advisers. The Order also applies to other agencies and offices as the President may designate, Executive Order 12898, sec. 1-102, 6-604 (Feb. 11, 1994). The agencies and offices that are listed in section 1-102 or designated by the President under section 6-604 of the Order are referred to herein as “covered agencies” and “covered offices,” respectively, and

WHEREAS, Executive Order 12898 requires each covered agency to “make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations,” *id.*, sec. 1-101, and

WHEREAS, each responsibility of a covered agency under Executive Order 12898 “shall apply equally to Native American programs,” *id.*, sec. 6-606, and

WHEREAS, Executive Order 12898 establishes an Interagency Working Group on Environmental Justice (“Interagency Working Group”) consisting of the heads of the agencies and offices listed above and any other officials designated by the President, or their designees, *id.*, sec. 1-102(a), and

WHEREAS, Executive Order 12898 directs the Interagency Working Group to assist the covered agencies by providing guidance and serving as a clearinghouse, *id.*, sec. 1-102(b), and

WHEREAS, Executive Order 12898, as amended, required that the then-covered agencies submit to the Interagency Working Group by March 24, 1995, an agencywide environmental justice strategy to carry out the Order, *id.*, sec. 1-103(e), as amended by Executive Order 12948 (Jan. 30, 1995), and

WHEREAS, Executive Order 12898 further required, within two (2) years of issuance, that the then-covered agencies provide to the Interagency Working Group a progress report on implementation of the agency’s environmental justice strategy, Executive Order 12898, sec. 1-103(f), and

WHEREAS, Executive Order 12898 requires that covered agencies conduct internal reviews and take such other steps as may be necessary to monitor compliance with the Executive Order, *id.*, sec. 6-601, and provide additional periodic reports to the Interagency Working Group as requested by the Group, *id.*, sec. 1-103(g), and

WHEREAS, Executive Order 12898 provides that a member of the public may submit comments and recommendations to a covered agency relating to the incorporation of environmental justice principles into the agency’s programs or policies and provides that the agency must convey such recommendations to the Interagency Working Group, *id.*, sec. 5-5(a), and

WHEREAS, the covered agencies and the Interagency Working Group remain committed to full ongoing compliance with Executive Order 12898, and

WHEREAS, Executive Order 12898 does not preclude other agencies from agreeing to carry out the Order and to participate in the activities of the Interagency Working Group as appropriate, and as consistent with their respective statutory authorities and the Order;

NOW THEREFORE, the undersigned agencies (referred to herein as “Federal agencies”) hereby agree:

I. Purposes

- A. To declare the continued importance of identifying and addressing environmental justice considerations in agency programs, policies, and activities as provided in Executive Order 12898, including as to agencies not already covered by the Order.
- B. To renew the process under Executive Order 12898 for agencies to provide environmental justice strategies and implementation progress reports.
- C. To establish structures and procedures to ensure that the Interagency Working Group operates effectively and efficiently.
- D. To identify particular areas of focus to be included in agency environmental justice efforts.

II. Authorities

This Memorandum of Understanding on Environmental Justice and Executive Order 12898 (“Memorandum of Understanding” or “MOU”) is in furtherance of the Order, including the authorities cited therein. Federal agencies shall implement this Memorandum of Understanding in compliance with, and to the extent permitted by, applicable law.

III. Actions and Responsibilities

- A. Adoption of Charter.** This Memorandum of Understanding adopts the Charter for Interagency Working Group on Environmental Justice (“Charter”) set forth in Attachment A. Each Federal agency agrees to the framework, procedures, and responsibilities identified in the Charter and agrees to provide the Interagency Working Group with the agency’s designated Senior Leadership Representative and Senior Staff Representative by September 30, 2011.
- B. Participation of Other Federal Agencies.** While Executive Order 12898 applies to covered agencies, the Order does not preclude other agencies from agreeing to undertake the commitments in the Order. Likewise, while the Executive Order identifies the composition of the Interagency Working Group, other agencies may, to the extent consistent with the Order, participate in activities of the Interagency Working Group as appropriate. An agency that is either not a covered agency or not represented on the Interagency Working Group, or both, may become a “Participating Agency” by signing this Memorandum of Understanding. To the extent it is not already a covered agency, a Participating Agency agrees to carry out this Memorandum of Understanding, as well as Executive Order 12898, and to the extent it is not already

represented on the Interagency Working Group, a Participating Agency agrees to participate in activities of the Interagency Working Group, as appropriate. The term “Federal agency” herein refers to covered agencies that sign this MOU and to Participating Agencies that sign this MOU.

C. Federal Agency Environmental Justice Strategies; Public Input; Annual Reporting.

1. **Environmental Justice Strategy.** By September 30, 2011, after reviewing and updating an existing environmental justice strategy, where applicable, and as the agency deems appropriate, each Federal agency will post its current “Environmental Justice Strategy” on its public webpage and provide the Interagency Working Group with a link to the webpage. If the agency posts and provides a draft Environmental Justice Strategy, then it will post and provide its final Environmental Justice Strategy by February 11, 2012. Thereafter, each Federal agency will periodically review and update its Environmental Justice Strategy as it deems appropriate and will keep its current Environmental Justice Strategy posted with a link provided to the Interagency Working Group.
2. **Public Input.** Consistent with Executive Order 12898, section 5-5, each Federal agency will ensure that meaningful opportunities exist for the public to submit comments and recommendations relating to the agency’s Environmental Justice Strategy, Annual Implementation Progress Reports, and ongoing efforts to incorporate environmental justice principles into its programs, policies and activities.
3. **Annual Implementation Progress Report.** By the February 11 anniversary of Executive Order 12898 each year, beginning in 2012, each Federal agency will provide a concise report on progress during the previous fiscal year in carrying out the agency’s Environmental Justice Strategy and Executive Order 12898. This “Annual Implementation Progress Report” will include performance measures as deemed appropriate by the agency. The report will describe participation in interagency collaboration. It will include responses to recommendations submitted by members of the public to the agency concerning the agency’s Environmental Justice Strategy and its implementation of the Executive Order. It will include any updates or revisions to the agency’s Environmental Justice Strategy, including those resulting from public comment. The agency will post its Annual Implementation Progress Report on its public webpage and provide the Interagency Working Group with a link to the webpage.

D. Areas of Focus. In its Environmental Justice Strategy, Annual Implementation Progress Reports and other efforts, each Federal agency will identify and address, as appropriate, any disproportionately high and adverse human health or environmental effects of its programs, policies and activities on minority populations and low-income populations, including, but not limited to, as appropriate for its mission, in the following areas: (1) implementation of the National Environmental Policy Act; (2) implementation of Title VI of the Civil Rights Act of 1964, as amended; (3) impacts from climate change; and (4) impacts from commercial transportation and supporting infrastructure (“goods movement”). These efforts will include interagency collaboration. At least every three (3) years, the Interagency Working Group will, based in part on public recommendations identified in Annual Implementation Progress Reports, identify important areas for Federal agencies to consider and address, as appropriate, in environmental justice strategies, annual implementation progress reports and other efforts.

IV. Miscellaneous

- A. Parties, Effective Date, Amendment.** This MOU becomes effective for a Federal agency when it signs the MOU. An agency may sign the MOU at any time. The MOU may be amended by written agreement of the then-current signatory Federal agencies.
- B. Applicable Law.** Nothing in this MOU shall be construed to impair or otherwise affect authority granted by law to, or responsibility imposed by law upon, an agency, or the head thereof, or the status of that agency within the Federal Government. This MOU shall be implemented consistent with applicable law and subject to the availability of appropriations.
- C. Fiscal.** This MOU is not a fiscal or financial obligation. It does not obligate a Federal agency to expend, exchange or reimburse funds, services or supplies, or to transfer or receive anything of financial or other value.
- D. Internal Management.** This MOU and activities under it relate only to internal procedures and management of the Federal agencies and the Interagency Working Group. They do not create any right or benefit, substantive or procedural, enforceable at law or in equity by any party against the United States, its agencies or other entities, its officers, employees or agents, or any other person.

V. Signatures

A. Covered Agencies.

\S

Eric H. Holder, Jr.
Attorney General of the United States

Date: _____

\S

Ken Salazar
Secretary of the Interior

Date: _____

\S

Thomas J. Vilsack
Secretary of Agriculture

Date: _____

\S

Hilda L. Solis
Secretary of Labor

Date: _____

\S

Kathleen Sebelius
Secretary of Health and Human Services

Date: _____

\S

Shaun Donovan
**Secretary of Housing and Urban
Development**

Date: _____

\S

Ray LaHood
Secretary of Transportation

Date: _____

\S

Steven Chu
Secretary of Energy

Date: _____

\S

Lisa P. Jackson
Administrator
U.S. Environmental Protection Agency

Date: _____

\S

Rebecca M. Blank
Acting Secretary of Commerce

Date: _____

\S

John Conger
Acting Deputy Under Secretary
(Installations and Environment)
Department of Defense

Date: _____

B. Participating Agencies and Offices.

\S

Arne Duncan
Secretary of Education

Date: _____

\S

Eric K. Shinseki
Secretary of Veterans Affairs

Date: _____

\S

Janet Napolitano
Secretary of Homeland Security

Date: _____

\S

Nancy Sutley
Chair
Council on Environmental Quality

Date: _____

\S

Martha Johnson
Administrator
General Services Administration

Date: _____

\S

Karen G. Mills
Administrator
Small Business Administration

Date: _____

Exhibit 4

Trial Day 1:

Testimony of Mark P. Stehly and Chris Allen Roberts

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UNITED STATES DISTRICT COURT
CENTRAL DISTRICT OF CALIFORNIA - WESTERN DIVISION
HONORABLE JOHN F. WALTER, U.S. DISTRICT JUDGE

- - -

ASSOCIATION OF)
AMERICAN RAILROADS, et al.,)
)
Plaintiffs,)
)
vs.)
)
SOUTH COAST AIR QUALITY)
MANAGEMENT DISTRICT, et al.,)
)
Defendants.)
)

Case No.
06-1416-JFW

COPY

REPORTER'S TRANSCRIPT ON APPEAL
COURT TRIAL - DAY 1
VOLUME I - (Pages 1 - 261)
TUESDAY, NOVEMBER 28, 2006
8:30 A.M.
LOS ANGELES, CALIFORNIA

VICTORIA L. VALINE, CSR 3036, RMR, CRR
FEDERAL OFFICIAL COURT REPORTER
312 NORTH SPRING STREET, ROOM 440
LOS ANGELES, CALIFORNIA 90012
PHONE: (213) 625-1580
victoria.valine@sbcglobal.net

1 BY MR. O'NEILL:

2 Q. Now, you're an environmental guy, broadly stated,
3 correct?

4 A. I'm the head of our environmental program.

5 Q. You are not a railroad operations guy?

6 A. I am inside the operating department, that's where
7 I'm located. I spend a lot of my time with -- concerning
8 railroad operations.

9 Q. You -- your title is environmental?

10 A. My title is Assistant Vice President Environmental
11 and Research and Development.

12 Q. And, do you spend a goodly portion of your time
13 testifying and appearing before public bodies, correct?

14 A. That is part of my duties, yes.

15 Q. And, you do that in respect of environmental issues
16 including air quality issues; is that correct?

17 A. Most of the people around here know me from that,
18 but I do testify for other bodies about other railroad
19 research and locomotive issues, track, things like that.

20 Q. Well, can a -- can a -- do you feel that you
21 understand the issue of railroad fuel as an issue that
22 falls within your jurisdiction?

23 A. Fuel conservation, fuel quality, yes.

24 Q. And how about fuel expense?

25 A. I'm very familiar with our fuel expense because of

1 our fuel conversation efforts.

2 Q. Now, fuel conversation is important because fuel is
3 your second biggest expense at BNSF, isn't it?

4 A. Recently that's true.

5 Q. The data I have is perhaps a little old, but it's
6 true, isn't it, that BNSF consumed about 1.5 or 1.15
7 billion gallons of fuel back in 2002?

8 A. Um -- I believe that's the correct number.

9 Q. The number now is closer to 2 billion gallons of
10 fuel per year, isn't it?

11 A. No.

12 Q. It's true, isn't it, that on any given day
13 locomotives driven by or operated by BNSF personnel burn
14 130,000 gallons of fuel just from idling?

15 A. I've never calculated it systemwide, so I don't
16 know.

17 Q. Do you know that BNSF has stated in a document that
18 they've published that 60 percent of the idling done by
19 BNSF locomotives is nonessential idling?

20 A. Um -- could you repeat that, please?

21 Q. Yes.

22 It's true, isn't it, that 60 percent of the idling
23 done by BNSF locomotives is nonessential idling?

24 A. I don't think I've produced that number.

25 Q. What is your number?

1 A. I don't know. Again, I haven't gone through it and
2 produced -- determined what it is essential versus
3 nonessential.

4 MR. O'NEILL: Your Honor, I don't know exactly
5 how to work the gizmo, if my assistant can -- if we
6 can --

7 THE COURT: Of course.

8 MR. O'NEILL: Could Exhibit 58 be placed before
9 the witness, sir, please?

10 Do you see that there sir?

11 THE COURT: Is that in the binder he has in front
12 of him or is --

13 MR. O'NEILL: Yes, I think it is because it's an
14 impeachment document of ours.

15 THE COURT: All right. If you could have one of
16 your --

17 MR. O'NEILL: Your Honor, all these have been
18 provided them in hard form and these will be called up
19 for all of us on electronic form.

20 THE COURT: All right. To any -- to the witness,
21 if you can't review the document on the screen and you
22 prefer to see the exhibit in hard copy, just let me know,
23 otherwise I'll assume that you can deal with it on the
24 screen. All right?

25 THE WITNESS: That's fine. Thank you.

1 THE COURT: All right.

2 BY MR. O'NEILL:

3 Q. Do you have that there before you, sir?

4 A. I do.

5 Q. Do you recognize that as a document produced by
6 BNSF?

7 A. Yes.

8 Q. You can see there, can you not, that the railroad
9 is -- yeah, could you take a look at that where it
10 reflects that, in fact, BNSF did consume over 1.1 gallons
11 of fuel in 2002?

12 MR. KRAMER: Excuse me, your Honor. It's
13 difficult to read this on the screen, could we have
14 the --

15 THE COURT: Not now, he's enlarged it.

16 MR. KRAMER: Oh, okay.

17 BY MR. O'NEILL:

18 Q. You see that there, don't you, sir?

19 THE COURT: My eyesight isn't that good,
20 Mr. Kramer. If your eyesight is -- doesn't allow you to
21 read it, let me know.

22 MR. KRAMER: I can see it now that he made it
23 big, your Honor.

24 THE COURT: All right.

25 THE WITNESS: Thank you.

1 BY MR. O'NEILL:

2 Q. Do you see that?

3 A. I agree in 2002 we consumed over 1.1 billion
4 gallons.

5 Q. Do you agree that of that 1.1 billion gallons of
6 fuel about 4 percent was consumed while the locomotives
7 were idling?

8 A. Um -- right. I see the 60 percent of idling time
9 was avoidable.

10 Q. Okay. Thanks.

11 Now, you say you see that, do you know that?

12 A. Um -- no, and I didn't produce it.

13 Q. Do you disavow that statement on behalf of BNSF?

14 A. I don't have a way to validate it, so I don't know.

15 Q. This was published, was it not, to the BNSF
16 personnel?

17 A. Yeah, done by John Quilty.

18 Q. And John Quilty was an officer of BNSF at the time?

19 A. Yes.

20 Q. You have no reason to believe that John Quilty was
21 in the business of misrepresenting BNS affairs to its
22 employees, do you?

23 A. I don't know what he meant by necessary and
24 unavoidable versus avoidable, what his definition of the
25 term was. In what reference he was using this number.

1 Q. Now, you've engaged yourself or involved yourself
2 in appearances and conversations with agencies around the
3 United States, it sounds like, relative to environmental
4 matters, right?

5 A. I have.

6 Q. Is every area the same or do some areas differ?

7 A. In what respect?

8 Q. Those sort of characteristics which might affect
9 air pollution.

10 A. Different parts of the country have different
11 levels of air quality caused by -- you know, with
12 different causes for their air quality.

13 Q. Like geography?

14 A. Topography for sure.

15 Q. Like climate?

16 A. Yes.

17 Q. Like hours of sunshine per day?

18 A. Um -- that could affect things like ozone. It
19 wouldn't affect other things.

20 Q. Ozone is a pretty bad thing, isn't it, in
21 concern -- in respect of air pollution?

22 A. It's one of the criteria of pollutants, one of
23 concern, yes.

24 Q. It's the heart and soul of smog, isn't it?

25 A. That's correct.

1 pre-existing idling rules?

2 A. That's not true.

3 Q. It's true, isn't it, that under the BNS -- under
4 the MOU anti-idling rule nonessential idling is limited
5 to 60 minutes?

6 A. Um -- nonessential idling is limited to 60 minutes,
7 yes.

8 Q. And, the determination of what is essential or not
9 is made by the BNSF personnel, correct?

10 A. There are criteria for essential idling needed for
11 the safety of the train, needed for the comfort of the
12 crew to meet federal guidelines for the crew environment,
13 and for maintenance -- purposes of maintenance.

14 Q. And, the determination of that essential or
15 nonessential quality is the determination made by the
16 BNSF operating personnel, correct?

17 A. If we're cited for it, there's a procedure that Air
18 Resources Board adjudicates the issue and they decide.

19 Q. And it's been in place for awhile, hasn't it?

20 A. Yes.

21 Q. Has it had some serious adjudications with the Air
22 Resources Board?

23 A. We've paid fines, yes.

24 Q. Okay. And in what amounts?

25 A. Um -- I -- I don't know the amount.

1 Q. And how many?

2 A. 10,000, 20,000, I don't know, something like that.

3 Q. You're just guessing?

4 A. Well, I -- I know it's not a -- a really large
5 number. We've been very successful in complying with the
6 regulation.

7 Q. And what, roughly, was the gross income of BNSF
8 last year?

9 A. Um -- I -- you want net profit?

10 Q. Gross revenues.

11 A. Gross revenues -- um -- 10, \$12 billion.

12 Q. Billion?

13 A. Billion.

14 Q. Okay. Now, it's correct, isn't it, that
15 anti-idling devices have a benefit to the railroad?

16 A. It reduces our fuel consumption and improves air
17 quality, yes.

18 Q. Fuel consumption, a big issue with you guys, right?

19 A. Yes.

20 Q. Given that prices are kind of out of control --
21 it's back now, but there's no predicting where the price
22 on fuel oil is going to go, is there?

23 A. Um -- the cost of diesel fuel is a significant part
24 of our cost, it's very important.

25 Q. And it's true, isn't it, that BNSF's primary

1 interest in effectuating anti-idling rules is fuel
2 conservation?

3 A. It's one. Reducing emissions is another.

4 Q. Now, if you put anti-idling devices on switchers,
5 that will save you something like 10 percent of fuel cost
6 for switchers, wouldn't it?

7 A. Um -- yeah, it would save us about 10 percent of
8 fuel costs for yard switchers.

9 Q. Okay. And, if you put anti-idling devices on
10 over -- could you describe for the Court what the
11 railroad's term is for a train that will take a load of
12 freight from say the harbor to Kansas City, what do you
13 call that type of train?

14 A. Well, I mean, it is -- it is a train, a long haul
15 train.

16 Q. Long haul?

17 A. Right.

18 Q. And, the locomotives which pull those long haul
19 trains are called what?

20 A. Line haul locomotives.

21 Q. Line haul locomotives.

22 So, with respect to line haul locomotives, if you
23 were to put anti-idling devices on, they too would save
24 in the range of 10 percent on the fuel costs attendant to
25 a line haul locomotive, correct?

1 A. That's not true.

2 Q. What would be the savings?

3 A. Um -- a matter of a few percent. They burn a lot
4 more fuel than a switcher does and the amount of
5 idling -- fuel burned in idling as a percentage of their
6 total fuel is a lot less.

7 Q. Okay. Now, are all of the switchers basically
8 intrastate locomotives?

9 A. Um -- inside California and the South Coast, that's
10 true.

11 Q. Okay. Now, under the MOU BNSF is already equipped,
12 50 percent or more, of the intrastate with anti-idling
13 devices, right?

14 A. We're very close to that, yes.

15 Q. And, under the MOU you will have more than
16 70 percent of the intrastate locomotives affixed with
17 anti-idling devices by July '07?

18 A. Yes.

19 Q. And by July '08, approximately 99 percent will have
20 been so equipped?

21 A. That's correct.

22 Q. So, with respect to intrastate locomotives,
23 including the switchers which are yard switchers or the
24 other switchers whose name I can't recall --

25 A. Road switchers.

1 Q. -- road switchers -- they're going to be all
2 equipped with anti-idling devices within a year and a
3 half, roughly?

4 A. Yes.

5 Q. And it's true, isn't it, that the interstate road
6 locomotives which BNSF is buying are going to all be
7 equipped and are equipped with anti-idling devices? New
8 acquisitions?

9 A. New acquisitions have it on it, yes.

10 Q. And all of them have these -- and if these
11 anti-idling devices are on a locomotive, and they are set
12 for 15 minutes -- which I guess some of them are?

13 A. I believe all of ours are now.

14 Q. -- then the proscriptions or the prohibitions of
15 this Rule 3501 do not apply, correct?

16 A. That's my understanding. There's some concern
17 about how -- for the annual report whether it applies,
18 but I -- I think in general the recordkeeping is reduced.

19 Q. Okay. And all locomotives with anti-idling devices
20 set for 15 minutes or less are also exempt from Rule
21 3502, aren't they?

22 A. I believe so.

23 Q. Now, I understand from your direct testimony and
24 your declaration that you are an active participant in
25 the district -- South Coast District's rulemaking

1 wouldn't you agree with that?

2 A. The last several years, yes.

3 Q. And, the railroads are not operating within the
4 bounds of a small state with a small set of rules with
5 which to comply, are they?

6 A. We operate --

7 Q. The class one railroads.

8 A. We operate according to federal rules that are
9 generally consistent along long stretches of our
10 territory.

11 Q. And, you operate across a very wide geographic
12 area, your railroad?

13 A. I would say so, yes.

14 Q. And, you cross a goodly number of state lines, I
15 think you operate in 28 different states?

16 A. I believe that's the right number.

17 Q. And there's got to be hundreds or thousands of
18 states, counties -- of counties, cities, and other
19 smaller jurisdictions, correct?

20 A. I never add them up, but that seems right.

21 Q. And often they have their own rules which affect
22 railroads, don't they?

23 A. Not often, no.

24 Q. Despite this broad spread the railroad's able to
25 operate because they get crew members who are well

1 trained and intelligent, correct?

2 A. We believe they are.

3 Q. And you spend a lot of time training your crews, do
4 you not?

5 A. Consistency of practices helps us with that.

6 Q. And you assign your employees to specific
7 geographic regions at BNSF?

8 A. They are qualified by territories, yes.

9 Q. And, you will often train them to operate in
10 specific geographic regions paying attention to the
11 variables of topography, geography, and rules, right?

12 A. Generally they're all trained to operate our trains
13 safely. There may be some local hazards, but in general,
14 they all receive the same training.

15 Q. And BNSF, across its -- the wide range that it
16 travels, has specific no idling zones in some places with
17 which they comply?

18 A. Um -- I'm not aware of any.

19 Q. You're not aware of no idling zones?

20 A. No.

21 Q. Are you aware there are different speed
22 restrictions in different areas of the country in
23 different municipalities?

24 A. We set our --

25 Q. I'm sorry?

1 A. There's a speed limit for every track. We set the
2 speed limits. There are places that I think they've
3 negotiated speed limits with a -- with a municipality.

4 Q. And I take it it's more the negotiations you
5 understand that the railroad complies with those limits,
6 correct?

7 A. Um -- I don't believe it's a regulation.

8 Q. That's not the question. Doesn't the railroad
9 comply with those speed limits?

10 A. No. It -- if we do, it's voluntary to the best of
11 my knowledge.

12 Q. There are noise limitations specific to the blowing
13 of horns, are there not, in different municipalities?

14 A. Um -- not that I'm aware of on -- on -- there are
15 federal regulations that we have to blow our horn at
16 certain crossings and we have to blow it in a certain
17 manner at a crossing. And if there are quiet zones,
18 those are regulated by the federal government about --
19 about those quiet zones.

20 Q. So, you're not aware of local no idling zones?

21 A. Local no idling zones --

22 Q. Your testimony is you're unaware -- I just want to
23 get it straight -- you're not aware that there are no
24 local no idling zones, not federal, local.

25 MR. KRAMER: Objection, asked and answered.

1 THE COURT: Sustained.

2 BY MR. O'NEILL:

3 Q. You're not aware there are local horn prohibitions?

4 A. There are quiet zones and they're regulated by the
5 federal government and we may have voluntarily agreed in
6 some places not to blow a horn, but it's -- it's
7 regulated by the federal government.

8 Q. Okay. And there are local rules about how long
9 trains can block intersections which differ from
10 place-to-place?

11 A. People attempt to enforce some of those rules on
12 us, yes. I'm not as familiar with that as I am with
13 noise.

14 Q. And BNSF has actually negotiated agreements on some
15 of these issues with different jurisdictions, say
16 Seattle, correct?

17 A. I'm not nearly as familiar with grade crossing
18 blockage issues as I am with noise.

19 Q. Okay. Now, I take it from your testimony that
20 voluntariness is the key to BNSF's decision of whether or
21 not to be regulated.

22 MR. KRAMER: Objection, misstates his testimony.

23 THE WITNESS: Well, if -- it's not a regulation
24 of we --

25 THE COURT: Wait a minute.

1 THE WITNESS: -- voluntarily agree to it --

2 THE COURT: Sir --

3 THE WITNESS: -- it's a contract.

4 THE COURT: Sir, your counsel has made an
5 objection.

6 What's the objection?

7 MR. KRAMER: Objection, misstates his testimony.

8 THE COURT: The objection is overruled. You can
9 answer the question.

10 THE WITNESS: I believe it's not a regulation in
11 my mind. If it's voluntary, it's a contract between us
12 and the party that -- that we're -- that we've agreed
13 with.

14 BY MR. O'NEILL:

15 Q. I have a handful of questions about Rule 3503 if
16 you have that in mind.

17 Under the MOU it would be 2005, I think, the
18 railroad has agreed to prepare an emissions inventory,
19 correct?

20 A. Yes.

21 Q. And to cooperate on health risk assessment, right?

22 A. That's correct.

23 Q. And I believe your position is that the railroad --
24 when I say "the railroad", I mean BNSF, and if I lapse
25 into U.P., hit me again.

1 THE COURT: All right. Cross-examination.

2 MR. O'NEILL: Thank you, your Honor.

3 CROSS-EXAMINATION

4 BY MR. O'NEILL:

5 Q. Good afternoon, Mr. Roberts. My name is Brian
6 O'Neill. I represent the District.

7 A. Okay, sir.

8 Q. I'd like to take you on a familiarization trip and
9 ask you if you've ever handled a familiarization trip
10 yourself?

11 A. Yes, I have.

12 Q. Okay. And have you ever gone over a line of track
13 which includes in it a municipality or some other
14 political district where they had an agreement of some
15 sort relative to blowing the horn too long?

16 A. I'm not -- I'm not sure -- blowing the horn too
17 long?

18 Q. I understood you to say before that there are no
19 situations where there are local requirements to impose
20 upon a railroad to not blow your horn too loud or too
21 long?

22 A. No, I didn't --

23 Q. Oh, didn't you? Do you know of any such --

24 A. That's -- that's not what I said. I said the
25 process for those is consistent application across our

1 network. It's not a patchwork -- it was in reference to
2 the question about it being a patchwork of things and I
3 disagreed with that.

4 Q. No, I understand. I'm asking you whether you're
5 aware or have you ever yourself experienced a
6 familiarization trip where the issue of such a local
7 regulation, rule, or limit -- however you want to
8 characterize -- it was in place?

9 He doesn't have the answer. You should look at me.
10 He's not going to be able to tell you.

11 A. I wasn't -- I'm not sure -- I think I understand
12 your question. I know about rules that are within BNSF
13 that indicate when we have a quiet zone and you don't
14 blow the whistle.

15 Q. And where you have a speed limit where you don't go
16 too fast?

17 A. We have speed limits all across our railroad.

18 Q. You have them sometime by agreement with the local
19 jurisdiction, do you not?

20 A. That's correct.

21 Q. In the familiarization trip, part of the process of
22 that trip is to instruct the crew members, listen when
23 you're going through West Waxahachie, they have this horn
24 blowing rule and you can't blow the horn more than
25 five seconds?

1 A. That's not correct. We have signs that indicate
2 when you do and don't blow the whistle.

3 Q. Is it your --

4 THE COURT: Mr. O'Neill, don't interrupt him he
5 wasn't finished with his answer.

6 MR. O'NEILL: I'm sorry, sir. I didn't realize
7 you were still talking.

8 THE COURT: Finish your answer.

9 THE WITNESS: I'm just saying it's consistent how
10 they apply, so you don't have to familiarize yourself
11 that there's a quiet zone or this restriction, it's the
12 way we operate all across our network.

13 BY MR. O'NEILL:

14 Q. I'm talking about a new guy, Brian O'Neill just
15 signed on as an engineer, I'm going to go out in this
16 east Arizona territory or district -- I think you call it
17 a district -- never been there before, I'm not going out
18 there alone, right?

19 A. Before you went out there, you were trained --

20 Q. Got it.

21 A. -- on the rules applicable that we operate on. The
22 general code of operating rules, the air brake and train
23 handling rules and our safety rules.

24 Q. And was I also told -- told at the time of my
25 training or did I wait for my familiarization trip to be

1 told that listen this is Pocahontas, Arizona, you can't
2 park -- you can't park at an intersection more than
3 three minutes?

4 A. No, but you have been trained on how you operate
5 over a subdivision and that's through the timetable and
6 the timetable indicates where those locations exist.

7 Q. So, there is a way of instructing the people that
8 are going to be driving these trains about these sort of
9 local conditions, am I correct?

10 A. Yes.

11 Q. And, you do that -- the railroad trains these
12 people to do it?

13 A. We train them to comply with the rules, that's
14 correct.

15 Q. Now, have you ever read the FRA regs from start to
16 finish in one sitting?

17 A. No, sir.

18 Q. Do you think anybody really could?

19 A. I guess it's possible.

20 Q. It's possible, but the guy would have to be like a
21 Univac computer machine, wouldn't he, and have a lot of
22 coffee?

23 A. He would be extraordinary.

24 Q. And, that's because there are a whole bunch of
25 them, correct?

1 A. That is correct.

2 Q. And there are a whole lot of T's crossed and a
3 whole lot of I's dotted as you read through them, aren't
4 there?

5 A. Yes.

6 Q. A lot of real particular, peculiar stuff, right?
7 Now, it's expected --

8 A. I don't know that I agree with "peculiar".

9 Q. "Peculiar" is the wrong word, particular stuff?

10 A. Right.

11 Q. And under the railroad's rules and the federal law
12 itself, your engineers are required to be conversant with
13 those and to understand them, correct?

14 A. That's correct.

15 Q. And you want us to believe -- you're asking the
16 Court to believe that these same smart engineers who are
17 so well trained, who can master this volume of FRA regs
18 couldn't understand 3501?

19 You're not saying that, are you?

20 A. I'm saying they could be just as confused as I am
21 concerning their application.

22 Q. And when you get confused about something, how do
23 you address it?

24 A. I ask for interpretation.

25 Q. Okay. And once you've gotten that interpretation,

Trial Day 2:

Testimony of Chris Allen Roberts and Douglas Wills

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UNITED STATES DISTRICT COURT
CENTRAL DISTRICT OF CALIFORNIA - WESTERN DIVISION
HONORABLE JOHN F. WALTER, U.S. DISTRICT JUDGE

- - -

ASSOCIATION OF)
AMERICAN RAILROADS, et al.,)
)
Plaintiffs,)
)
vs.)
)
SOUTH COAST AIR QUALITY)
MANAGEMENT DISTRICT, et al.,)
)
Defendants.)
_____)

Case No.
06-1416-JFW

COPY

REPORTER'S TRANSCRIPT ON APPEAL
COURT TRIAL - DAY 2
VOLUME II - (PAGES 262 - 561)
WEDNESDAY, NOVEMBER 29, 2006
8:45 A.M.
LOS ANGELES, CALIFORNIA

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1 Do you recall providing that answer to those
2 questions?

3 A. Yes.

4 Q. And finally, do you recall being asked question:

5 "My question is -- and if you need to review the
6 MOU to answer it, feel free to do so.

7 "What changes did BNSF make in its operating
8 procedures in order to comply with the provisions of (D)
9 and (E) of the MOU?

10 "Answer: Just in reference to (D) and (E)?

11 "Answer: Yes, sir -- just in reference to (D) and
12 (E)?

13 "Question: Yes, sir.

14 "Answer: I don't know of any significant rule
15 changes to be made.

16 "Question: I'm after any so, either significant or
17 insignificant.

18 "Answer: I don't recall any rules changes.

19 "Question: Do you recall any operating changes
20 that were reflected -- not reflected in the rules?

21 "Answer: No."

22 Do you recall providing that testimony at that
23 time?

24 A. Yes, sir.

25 Q. And it's true, wasn't it?

1 A. Yes, sir.

2 Q. And finally, -- almost finally --

3 MR. O'NEILL: Can you indulge me one moment, your
4 Honor? Thirty seconds, please?

5 THE COURT: Yes.

6 BY MR. O'NEILL:

7 Q. Yesterday you talked at some length on direct
8 examination about your criticism of the railroading
9 knowledge of Collin Fulk.

10 Do you recall that testimony?

11 A. I recall the testimony, but I don't consider it
12 criticism, it was disagreement.

13 Q. Now, let me ask you this: Have you driven a
14 locomotive?

15 A. Yes.

16 Q. On one occasion, right, back during a strike --
17 breaking a strike?

18 A. No, on more occasions than that.

19 Q. Did you read Mr. Fulk's resume?

20 A. Yes, I did.

21 Q. Do you consider yourself more expert in the
22 operation of trains -- train -- as a train engineer than
23 Mr. Fulk?

24 A. On BNSF's operations, I do.

25 Q. And do you consider -- you read Mr. Haley's resume,

1 THE COURT: Before we start cross-examination,
2 why don't we take our morning break. The Reporter's been
3 going since early this morning.

4 We'll be in recess for 15 minutes.

5 (Off the record at 10:11 a.m. Back on the record
6 at 10:22 a.m.)

7 THE COURT: All right. You may begin your
8 cross-examination.

9 MS. JONES: Thank you, your Honor.

10 CROSS-EXAMINATION

11 BY MS. JONES:

12 Q. Good morning, Mr. Wills. My name is Suzanne Jones,
13 and I represent the District.

14 MS. JONES: Good morning, your Honor.

15 BY MS. JONES:

16 Q. U.P. wants to conserve fuel by curbing idling,
17 would you agree with that?

18 A. Yes.

19 MS. JONES: Can you bring up TRE-121 -- 7122.

20 BY MS. JONES:

21 Q. In fact, U.P. has a rule that's called Fuel
22 Conservation Engine Shutdown; is that correct?

23 A. That's correct. On this -- the one that you've got
24 on the screen here.

25 Q. Right.

1 THE COURT: What exhibit is this?

2 MS. JONES: This is trial Exhibit 121.

3 BY MS. JONES:

4 Q. And, you're familiar with that rule, correct?

5 A. This is a rule that Union Pacific did have, yes.

6 THE COURT: All right. There's no objection to
7 Exhibit 121, are you going to offer 121?

8 MS. JONES: Yes, your Honor. Although --

9 THE COURT: All right. 121 will be received into
10 evidence.

11 (Trial Exhibit 121 was marked for Identification
12 and received into Evidence.)

13 BY MS. JONES:

14 Q. Is it your -- were you saying in your testimony
15 that this is not your current rule?

16 A. That's correct.

17 Q. And if we can look at the bottom of the document, I
18 think it was produced to us as the latest version, it was
19 not the original version -- or am I mistaken about that?

20 At the bottom of the document doesn't it say,
21 "Revised July 2004"?

22 A. Yes, I see that.

23 Q. Has it been revised again?

24 A. Yes, it has.

25 Q. When was it revised again?

1 A. Um -- it was revised in May of 2005, and again
2 there was some slight modifications made to the rule in
3 2006. I don't recall specifically the exact date of
4 that, though, I'm sorry.

5 Q. And, are you aware -- has your counsel or has U.P.
6 provided us with these more recent updates?

7 A. Um -- I'm -- I'm not aware, ma'am.

8 Q. This is -- I'll just represent to you this rule
9 that I'm using here is the rule that was put on the trial
10 exhibit list and was my understanding was the recent
11 rule. And your understanding is it's been updated twice,
12 so why don't we cover together what exactly has been
13 changed in the rule, if you can tell me from the rule we
14 have on the screen.

15 THE COURT: Well, before we go into an analysis,
16 is there portions of the rule that you're going to refer
17 to?

18 And then, you can ask him if they're relevant,
19 whether or not they've been changed, rather than just
20 taking him through a wholesale analysis of revisions to
21 the rule.

22 MS. JONES: All right. Thank you, your Honor.

23 BY MS. JONES:

24 Q. Well, let's just -- there are really only three
25 paragraphs to the rule; is that correct?

1 This one that we have on the screen?

2 A. The one that's on the screen, yes.

3 Q. And that one begins with, "To conserve fuel on the
4 lead locomotive consist shut down trailing diesel engines
5 to be left standing unattended for one hour or longer.
6 In addition, the lead diesel engine --"

7 THE COURT: Counsel, is there a question? We can
8 all read the paragraph.

9 MS. JONES: Okay. All right.

10 Thank you, your Honor.

11 BY MS. JONES:

12 Q. All right. Has that first paragraph changed?

13 A. Yes. That first paragraph has been modified.
14 However, I would say this, I can't recall specifically
15 every modification that's been made to this without
16 having it in front of me.

17 Q. Okay. Can you tell me if the current version of
18 the rule still requires the shutdown of trailing diesel
19 engines -- locomotives after one hour of idling?

20 A. That's correct. Yes, ma'am.

21 Q. Okay. And does the current version of the rule
22 also still permit the shutdown of the lead locomotive in
23 these certain places -- in the yards, at designated
24 locomotive servicing and repair areas, and on the local
25 and road switcher where left at the normal tie-up area?

1 A. It talks in terms of an unattended locomotive in
2 those kinds of areas, yes.

3 Q. Thank you.

4 And so, if it's unattended, it's permitted to also
5 shut down the lead along with the trailing; is that
6 correct?

7 A. Not if it's attached to cars and we want to
8 maintain the air pressure on the cars, but if it's in a
9 condition where you're only shutting down the locomotive
10 in a yard and it's not attached to cars that you want to
11 maintain air pressure on the cars for purposes of air
12 brake tests or other safety concerns, then the lead
13 locomotive can be left running even if it is unattended.

14 Q. You mean shut down?

15 A. No. The lead --

16 Q. Oh --

17 A. -- will remain operative and running and the
18 trailing locomotive shut down if you're attached to cars
19 and we need to maintain the air pressure on the cars.

20 Q. Okay. Are there some circumstances where you're
21 still attached to cars and yet you're also allowed to
22 shut down the lead locomotive?

23 A. Yes.

24 Q. Okay.

25 A. That could happen if you were not maintaining air

1 pressure for air brake purposes or safety purposes.

2 Q. That's fine.

3 And what circumstances would those be?

4 A. One would be a case where you were in a yard -- in
5 a switching yard and the locomotives were attached to
6 cars that you were going to be switching and they hadn't
7 been made up into a train and they had not had their
8 initial terminal air brake test.

9 Q. And does it still use this broad terminology, just
10 generally in yards, in the current version of the rule?

11 A. Um -- I'm not -- I'm not sure exactly about that.
12 I apologize, but I can't say that without looking at it.

13 Q. Okay. Then moving to the second paragraph, does
14 the current rule also have the two -- well, I guess it's
15 kind of a second and third paragraph.

16 Does it have the two exceptions, leave the -- leave
17 them running if the temperature is expected to drop below
18 40 degrees?

19 A. Yes, it does.

20 Q. And then also, if you have an issue with respect to
21 fuel --

22 A. Yes, that --

23 Q. -- that paragraph stays the same?

24 A. -- that language is similar, yes.

25 Q. And how about the last paragraph which says,

1 "Contact the train dispatch or yard master or other
2 authority for information concerning the expected length
3 of the shutdown or the expected temperature during the
4 shutdown," is that still in the rule?

5 A. That is still in the rule, yes.

6 Q. Is there an additional provision?

7 Is there something in addition that's been added to
8 the rule?

9 A. The -- one of the things that I recall is that --
10 that distributed power is not shut down -- distributed
11 locomotives.

12 Q. Okay. So, maybe that's the --

13 A. That's part of -- that's part of --

14 Q. That's the major change in the number --

15 THE COURT: Wait a minute. Wait a minute. The
16 Court Reporter can only take down one person so please
17 don't speak over each other.

18 All right.

19 MS. JONES: I'm sorry, your Honor.

20 BY MS. JONES:

21 Q. Is that the main substantive change that you can
22 recall that has been made to the rule?

23 A. That -- that -- that is one of them, yes. The --
24 and right now I just can't recall, but I believe there
25 was something else, but it was not an issue with the hour

1 or the conditions of 40 degrees, those kinds of things.
2 I just -- I just don't recall what it was, I'm sorry.

3 Q. Thank you.

4 But, the -- the current version of the rule, just
5 as this version, requires shutdown after 60 minutes of
6 unattended idling of at least the trailing and
7 permissively the lead; is that correct?

8 A. Yes.

9 Q. And would you agree that this rule implicitly
10 recognizes that when a locomotive is unattended, there
11 are many times it does not need to be idling? That fuel
12 is being wasted?

13 A. Would you -- excuse me, go back to what you started
14 the question with.

15 Q. Sure.

16 A. You said --

17 Q. Would you agree that this rule implicitly
18 recognizes that when a locomotive is unattended and
19 idling, many times it does not need to be idling because
20 fuel is being wasted?

21 A. Yes.

22 Q. Thank you.

23 MS. JONES: Could you also bring up TRE-3711.
24 And focus on the top where it begins to say, "Shutting
25 down idling..."

1 BY MS. JONES:

2 Q. Do you recognize this document which is entitled,
3 "The Lowdown on the Shutdown" as a document produced by
4 U.P.?

5 A. I have seen it, yes.

6 Q. Okay. And I'll just draw your attention to the top
7 first sentence says, "Shutting down idling locomotives
8 benefits everyone far more than just cost-saving
9 initiatives. Shutting down location reduces diesel
10 emissions and benefits our environment, our communities,
11 your families and you. Air pollution is a public health
12 concern."

13 Do you see that?

14 A. Yes, I do.

15 Q. Do you agree with that statement?

16 A. Yes, I would.

17 Q. Are you aware, or do you agree that this pamphlet
18 was prepared for training of U.P. employees?

19 A. That would be an assumption on my part. I didn't
20 prepare the pamphlet, so I don't know.

21 Q. Okay. Do you know who Larry Schmid is? Larry
22 Schmid?

23 A. No, I don't know --

24 Q. Lanny Schmid -- whoops, I'm sorry, excuse me.
25 Lanny Schmid.

1 inspection report for the locomotive that they -- the
2 locomotives that they inspect. It's -- again, it's a
3 daily report meaning it only has to be done once a day.

4 So, if I'm an engineer and it's already been done,
5 I don't have to redo the report because it's already been
6 done for that day.

7 Q. Now, is that done in the same computer terminal
8 where someone would be entering their hours of service
9 information -- the hours for that day?

10 A. Yes, it is.

11 Q. What happens is, they just bring up a different
12 program on that computer terminal instead of entering the
13 information that goes for federal hours of service, it
14 goes into a different program, all the information about
15 the daily inspection report, correct?

16 A. You know, I gotta tell you I'm not the computer
17 programmer. I know that they enter it into the computer.
18 Where it goes after that, I'm not sure what happens to
19 it, to be honest with you.

20 MS. JONES: All right. Let's bring up TRE-740.
21 Next page.

22 If we can close-up on the top part of it. That's
23 great.

24 BY MS. JONES:

25 Q. Do you recognize this document?

1 A. Yes, I do.

2 Q. Now, this is one of the documents that is in daily
3 use by crews at U.P.; is that correct?

4 A. Yes, it is.

5 Q. And would you agree that a form like this would
6 already have three of the data points that we've been
7 talking about Rule 3501 requires on it?

8 You've got Union Pacific Railroad, so it says right
9 there already who the operator is. If you look down
10 below, you've got train ID, so we've also got the
11 information that we need about train ID information.
12 Then we've also got date and time in several places.

13 Do you see that?

14 A. Yes. Date and time.

15 Q. Would you agree that all you'd need to do by using
16 this existing form is just to add the milepost
17 information and the time information if you were to use
18 this for recording idling events?

19 A. No, I wouldn't agree with that, because what you'd
20 have to do is modify this form in such a way that you'd
21 have a place for all the individual locomotive numbers.
22 When we talk about train or job ID, that's not
23 necessarily the locomotive number. That -- that might be
24 the symbol of the train, not necessarily the locomotives.

25 And, you know, you would have potentially more

1 locomotives than just one, even if you were identifying
2 it as the lead locomotive, so you would have to have, you
3 know, multiple locomotives that you would be recording
4 idling events for in the same consist.

5 Q. But isn't it -- isn't it correct that locomotive
6 identifier is probably about five digits or it's a -- you
7 know, maybe a letter or two, U.P., and then maybe four
8 digit numbers?

9 A. Typically that would be the U.P. scheme of things,
10 yes.

11 Q. Okay. So, there's not a lot of information that
12 you would have to put in that -- it would maybe be three
13 little groups of a few numbers, correct?

14 A. Well, again, it depends on -- on how many idling
15 events that we would be talking about and how much
16 locomotives in each idling event. Remember, as we read
17 the recordkeeping here, we would have to discretely put
18 down each locomotive, the time that it was idled and shut
19 down, remembering that it takes time to shut one down, go
20 to the next one, shut it down, go to the next one and
21 shut it down.

22 You'd have three different locomotive identifiers
23 and then you'd have three different times, then you'd
24 also have three different times over there for the
25 duration of the idling event for the locomotives, they

1 would all be different.

2 Now, the milepost, obviously it would be the same.
3 And the locomotive owner, if they're not -- if they're
4 U.P. units, that would obviously be the same. But you'd
5 still have an occasion where you'd have different types
6 of events that you'd have to put down because they would
7 be different times. It's not as simple as just, you
8 know, one input is what I'm trying to tell you.

9 Q. You think it would be really complicated to try and
10 use this form to enter idling events on a certain run?

11 A. I don't think it would be complicated to --
12 necessarily to take a form like this and revise it in
13 such a manner that you could enter, you know, to gather
14 that data. I don't think that that's where the issue
15 comes in, necessarily, with gathering the data. It's
16 once you gather the data.

17 It's the time at the back end after you've gotten
18 off duty or you're getting off duty to enter all this
19 information into the computer is where the time would be
20 taken.

21 Q. Okay. So, you agree it would be pretty simple and
22 not very time consuming to jot things down on the
23 existing form that we're talking about?

24 A. One of the things that -- that -- that I do have a
25 problem with is having the conductors do a lot of

1 extraneous work with recordkeeping that is not of a
2 safety sensitive nature, and this is the one thing that
3 we always get pushback from from our crews when I'm out
4 doing audits and inspections with them, one of the first
5 things we talk about is making sure that we're focused on
6 what's going on as far as the operation.

7 Any time we ask them to do or require them to do
8 extra type of recordkeeping, we've got to be careful and
9 strike that balance between what's important and what's
10 not important. And so, I'd say that I'd be very careful
11 about having them -- making a priority of this type of
12 recordkeeping when they've got other duties to do. I
13 would be -- that would be something I would be very
14 concerned about.

15 Q. Isn't it true this recordkeeping is only triggered
16 if they're already idling somewhere?

17 They're already delayed. They're already stopped.
18 They're not going anywhere; isn't that what triggers the
19 recordkeeping?

20 A. That's what triggers the recordkeeping, but while
21 they're stopped, they might have other duties that they
22 need to be doing.

23 Q. They're not going anywhere. They're not going to
24 be off schedule if they're filling out the form,
25 correct?

1 A. As long as they're stopped, no.

2 MS. JONES: I wanted to address -- if I may, your
3 Honor?

4 THE COURT: All right. You have two more
5 minutes.

6 MS. JONES: Okay.

7 BY MS. JONES:

8 Q. If I may talk about hand brakes and this whole
9 issue of concern about the air in the air brakes.

10 Would you agree that -- you testified that the lead
11 locomotive should also be kept running in addition to
12 these hand brakes we've been talking about to secure the
13 locomotive; is that correct?

14 A. Yes.

15 Q. When you leave it unattended?

16 A. Yes, I did.

17 Q. But that's not a federal requirement, is it?

18 A. No, it is not a federal requirement.

19 Q. In fact, would you agree it's actually the opposite
20 under the federal regulations?

21 A. It's -- I'm not sure what you mean by the opposite
22 of what?

23 Q. Federal regulations made clear that hand brakes are
24 the primary source of securement and air brakes shall not
25 be relied upon to hold the train, whether you're leaving

Trial Day 3:

Testimony of Joel Benton Ritter, Michael Brazytis, and Colon Fulk

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UNITED STATES DISTRICT COURT
CENTRAL DISTRICT OF CALIFORNIA - WESTERN DIVISION
HONORABLE JOHN F. WALTER, U.S. DISTRICT JUDGE

- - -

ASSOCIATION OF)
AMERICAN RAILROADS, et al.,)
)
Plaintiffs,)
)
vs.)
)
SOUTH COAST AIR QUALITY)
MANAGEMENT DISTRICT, et al.,)
)
Defendants.)
_____)

Case No.
06-1416-JFW

COPY

REPORTER'S TRANSCRIPT ON APPEAL
COURT TRIAL - DAY 3
VOLUME III - (Pages 562 - 918)
THURSDAY, NOVEMBER 30, 2006
8:30 A.M.
LOS ANGELES, CALIFORNIA

VICTORIA L. VALINE, CSR 3036, RMR, CRR
FEDERAL OFFICIAL COURT REPORTER
312 NORTH SPRING STREET, ROOM 440
LOS ANGELES, CALIFORNIA 90012
PHONE: (213) 625-1580
victoria.valine@sbcglobal.net

1 A. Yes, I do.

2 Q. Do you recognize that signature, sir?

3 A. Yes, that's my handwriting.

4 Q. Did you sign this document on November 3, 2006 in
5 Los Angeles, California?

6 A. Yes, sir, I did.

7 MR. ENGLISH: Your Honor, I ask the Court
8 consider this declaration as Mr. Ritter's direct
9 testimony.

10 THE COURT: Yes. It will be so considered.

11 MR. ENGLISH: Thank you, your Honor. I have no
12 further questions.

13 THE COURT: All right. Cross-examination.

14 MR. O'NEIL: Thank you, your Honor.

15 CROSS-EXAMINATION

16 BY MR. O'NEILL:

17 Q. Good morning, Mr. Ritter. My name is Brian
18 O'Neill. I'm one of the lawyers for the District.

19 A. Good morning.

20 Q. Mr. Ritter, there's been placed before you trial
21 Exhibit 1, which is what we've been calling it, you would
22 know it as Rule -- a piece of Rule 3501, specifically
23 Section (d)(1).

24 Do you see that there before you?

25 A. Yes, sir.

1 Q. Do you see that that rule -- and did you
2 understand -- or do you understand that that rule contains
3 some prohibitions upon -- some requirements, rather, as to
4 information reporting and recording?

5 A. I understand that, yes, sir.

6 Q. Okay. And it's true, isn't it, that there are, at
7 subparagraph large (A)(5) separate pieces of information
8 which that rule requires to be recorded and then reported?

9 A. That's correct.

10 Q. Now, with regard to those various pieces of
11 information which would be required to be collected under
12 that rule, it's true, isn't it, that all of that
13 information is either currently recorded or could be
14 derived from information that's recorded in the locomotive
15 event recorders?

16 A. I believe so, it could.

17 Q. And you testified at your deposition, I believe --
18 and I want to ask you, is it true that approximately
19 90 percent of Union Pacific's locomotives are equipped
20 with event recorders?

21 A. Yes, sir, I did.

22 Q. Now, I believe in your declaration you contend that
23 deriving some of the information required by 3501 from the
24 data in the event recorders would be a burdensome process.

25 Do you recall that?

1 A. Yes.

2 Q. And one of the reasons you contend that it would be
3 burdensome is that the diameter of the locomotive's wheels
4 would need to be accurately recorded in order to generate
5 speed and -- yeah, location information.

6 Do you remember that?

7 A. Yes.

8 Q. And is that your position?

9 A. Yes.

10 Q. Now, it's true, isn't it, that under the federal
11 regs it is already required for Union Pacific to measure
12 and calibrate wheel diameters every 30 days?

13 A. I had an understanding it was once every 90 days.

14 Q. Now, is it true then that your concern about the
15 burden associated with measuring those wheels assumes that
16 Rule 3501's demands are of greater precision than the
17 Federal Railway Administration regulators have as to wheel
18 diameters?

19 A. Do you want to repeat that, sir?

20 Q. Yeah.

21 Is it your position that the burdens of 3501
22 associated with measuring wheel diameters would demand
23 greater precision than federal law when it comes to
24 tracking locomotive speed and location?

25 A. I would agree with that.

1 Q. You do. Okay.

2 Another reason you contend it would be difficult
3 to -- or burdensome for U.P. to comply with the rule, is
4 that U.P. would have to sort the data collected by event
5 recorders to exclude data outside the basin.

6 Do you remember that?

7 A. Yes.

8 Q. Do you recall that?

9 You have to answer yes or no, I'm sorry.

10 THE COURT: He did say yes.

11 MR. O'NEIL: I apologize to Court and counsel, I
12 sometimes don't hear so well.

13 BY MR. O'NEILL:

14 Q. Now, have you conducted any study or analysis as to
15 the feasibility of program in U.P.'s computers to
16 automatically sort the data from -- collected from event
17 recorders and exclude data from outside the basin?

18 A. No, I have not.

19 Q. You have some concerns, I understand from your
20 declaration, about the prospect that there would be more
21 injuries to U.P. employees due to more frequent shutting
22 down and restarting of locomotives which you believe would
23 result from the application of Rule 3502; isn't that
24 correct?

25 A. Yes, sir.

1 Q. And you believe that there would be an increased
2 rate of injuries or risk of injuries to U.P. employees if
3 U.P. were forced to comply with 3502, right?

4 A. Yes, sir.

5 Q. I believe one of the reasons that you believe there
6 would be an increased risk is that you believe that 3502
7 would result in an increase in the number of times U.P.
8 employees would have to shut down or restart locomotives,
9 correct?

10 A. Yes. That is correct.

11 Q. It's true, isn't it, that you haven't done any
12 study or analysis to determine the extent to which Rule
13 3502 would cause an increase in the number of times U.P.
14 employees would have to shut down and restart locomotives?

15 A. I have not done any studies.

16 Q. So, in fact, you haven't done any study which might
17 result in determining the extent to which the rule might
18 result in an increased risk of injuries?

19 A. Yes.

20 Q. That's true, you have not done such a study?

21 A. That's correct.

22 Q. One of your contentions, I believe, is that there
23 would be an increased risk of injuries to U.P. employees
24 associated with the tying and releasing of hand brakes
25 based on your belief that Rule 3502 would require a more

1 back later after thinking about it -- and it's in the
2 deposition, where a delay is also any time that it's not
3 making its scheduled run between A and B as well.

4 So, to say not only just stopped delay -- there's
5 other forms of delay as well.

6 Q. Fair enough.

7 Now, you've not done any studies, have you, to see
8 whether there would be any more delays if Rule 3502(d)(1)
9 was implemented than there are now?

10 A. I've done no official study, but what I do know is
11 if there are more reporting events and more shutdowns
12 there would be more delays.

13 Q. If there were more shutdowns, if there would be
14 more delays, there would be more delays?

15 A. Right.

16 Q. If there would be more delays, there would be more
17 delays, I agree with you.

18 A. If we had to shut down more under the rule than we
19 do that today, I would assume, from what I know, there
20 would be more delay.

21 Q. Now, you are familiar with and have read what we've
22 referred to here as a 2005 MOU, correct?

23 A. Yes, sir.

24 Q. And you're aware that the 2005 MOU contains some
25 shutdown provisions, that is to say some idling

1 limitations on locomotives?

2 A. Yes, sir.

3 Q. And it's true, isn't it, that Union Pacific has not
4 made any changes to its crew management procedures in
5 response to the requirements of the 2005 MOU?

6 A. Um -- those -- yeah, there would be -- as far as a
7 crew management procedure, there is -- there would have
8 been nothing.

9 MR. O'NEIL: Thank you for your time, sir.

10 MR. ENGLISH: I have nothing further, your Honor.

11 THE COURT: All right. Thank you very much.

12 Why don't you hang around and have coffee with
13 Mr. O'Neill and you can talk about football at the break.

14 THE WITNESS: For the record, I'm an Ohio State
15 fan, your Honor.

16 MR. O'NEIL: Oh, oh, oh.

17 (Laughter.)

18 THE COURT: Who's your next witness?

19 MR. ENGLISH: Our next witness, your Honor,
20 Mr. John Ready.

21 JOHN E. READY, PLAINTIFFS' WITNESS, SWORN

22 THE CLERK: Please state and spell your name for
23 the record.

24 THE WITNESS: John E. Ready, R-E-A-D-Y.

25 THE COURT: All right. Do we have a declaration

1 freight on the rear, and so a lot of those guys didn't
2 know how to -- how to use a freight-type graduated release
3 versus a direct release situation.

4 And I came back, actually did the class work, and
5 then went out physically in the field and observed
6 their -- it's a two-part, you always want to check to see
7 -- you know, you can pass the test, but now I want to see
8 if you can actually do it. So, the field work, I went and
9 observed if they were properly doing it.

10 Q. So, you first taught them in the classroom and then
11 went out in the field to see them do it?

12 A. Yes.

13 Q. Now, turn your attention, if you would, to another
14 subject --

15 MR. O'NEIL: You can take that off the board.

16 BY MR. O'NEILL:

17 Q. -- Mr. Roberts testified that while you were here,
18 to the effect that it's very -- the railroads need to have
19 uniform rules and they don't have any rules other than
20 federal rules limiting them as they drive the trains
21 across-country.

22 Do you remember that testimony?

23 A. Yes.

24 Q. Do you have a response to that testimony?

25 A. Are we talking about the many regulations --

1 Q. Yes, sir.

2 A. -- that the -- patchwork reference?

3 Q. Yes.

4 Could you -- in your experience, are there many
5 regulations of differing sorts and types with which train
6 engineers have to comply as they travel the country?

7 A. Sure. Yes.

8 Q. Could you describe that for the Court, please.

9 A. Well, as far as what we're required --

10 Q. The sort of things that happen and how the train --
11 could you tell us the sort of things an engineer confront
12 and how it is he plans to or knows how to comply with
13 them.

14 A. Okay. The federal regulations require -- they
15 address a lot of things. The brake test is one, many
16 other things they address, and sure, we -- the railroad --
17 we, as the railroad -- or I, as the railroad, when I was
18 in -- with Norfolk Southern, we gotta get that information
19 to the employees and we'll put it in many different forms
20 of contact information. It could be time tables,
21 bulletins, general orders, dispatchers' bulletins, rule
22 books.

23 Q. What is a time -- could you tell us what is a
24 timetable?

25 A. A timetable is a -- is a set of -- is a book -- is

1 a pamphlet, and it's maybe a half-inch thick, the average
2 timetable, and it will have a lot of -- it will have -- be
3 for a district or a division. And then it will break it
4 down to make it smaller. All right.

5 Then they will have subdivisions or sub-districts
6 and it will have what you, as a railroad employee, have to
7 do in these various sub-districts. And they do change.
8 The speed would change, the curve speed may change, you
9 may run 40-mile an hour on milepost 32 where, you know,
10 milepost 480 you're in 60. That sort of thing.

11 It's a way to deliver information -- it's a
12 reference book. It's required to be with the employee
13 when they're on duty. If I don't know, I reach in my
14 grip, and I get my timetable out, and I find out.

15 Q. Do the time tables contain such information as
16 local idling limitations?

17 A. Absolutely.

18 Q. What about information such as horn blowing?
19 Blowing the horn?

20 A. Sure. It will tell you there he is, either the
21 situation you just explained -- and where I do this, you
22 know, it's -- you need to know in advance. It's a sick
23 feeling if you just passed where you're supposed to do
24 that. You need to know in advance to comply with it. And
25 that's why you're required to carry it.

1 Q. What about the issues on impeding or obstructing
2 intersections?

3 A. Yes.

4 Q. In your 30-plus years of railroading, were you able
5 to comply with that sort of thing, notwithstanding or
6 maybe many different demands on you in the course of a
7 workday?

8 A. Absolutely.

9 Q. Now, were you here yesterday when there was a
10 Mr. Hunt who testified about the manner in which
11 locomotive consists are assembled?

12 A. Yes.

13 Q. Did you agree with Mr. Hunt's testimony concerning
14 how locomotive consists are typically assembled?

15 A. I -- I -- I have a problem with, you know, with
16 completely saying that something was different. I am
17 certainly not naive enough to believe that there are
18 unusual situations. There may be a situation he's
19 described where you have to take one locomotive at one end
20 of the yard 3 miles, bring it -- run it up to the other
21 end, then go back at some other point in the yard and
22 bring that one, but certainly as a rule, the locomotives
23 are housed and stored at facilities and it's usually
24 shorter tracks, condensed area.

25 In my video, when I visited the two rail yards, we

Exhibit 5

Railex, Inc.**Colon R. Fulk****Railway Consultant/Expert Witness**

4305 Pointe Norman Drive * Sherrills Ford, NC 28673

T 828.478.9666 * F 828.478.9660

November 13, 2013

Ms. Barbara Baird
District Counsel
SCAQMD

You have asked me to provide you with my comments referencing a letter dated September 27, 2013 from Joseph Szabo to Mr. Jared Blumenfeld, Regional Administrator for the United States Environmental Protection Agency, Region 9.

The letter addressed concerns Mr. Szabo has with potential safety and operational issues the rail industry would incur while complying with two proposed locomotive idling rules that were submitted to the Region 9 U.S. Environmental Protection Agency by the California Air Resource Board (CARB) on behalf of the South Coast Air Quality Management District (SCAQMD) for inclusion in California's State Implementation Plan (SIP).

Mr. Szabo listed four bullet points in his letter, the first point reads as follows:

- Cause confusion because the CARB proposed rules define "unattended" in a manner that potentially conflicts with FRA's definition of "unattended equipment" in 49 CFR 232.103(n):

I find no confusion in the term "unattended", unattended is unattended, period. It has been my experience the rail industry and the FRA understands what "unattended" means. It is my belief the interpretation of "unattended" in Rule 3502 parallels railroad operating rules and federal regulations already in place. Simply meaning that if there are no qualified railroad personnel to control the braking system that train is considered to be "unattended". Rule 3502 has a slightly different wording of "unattended" stating that a person must be physically on the locomotive or the locomotive is considered "unattended." It is my opinion the difference in wording is insufficient to create confusion and has no appreciable merit to the issue in question.

As per railroad operating rules and federal regulations an unattended train will be secured, i.e., the application of a sufficient number of handbrakes to ensure the train will not move should the trains' air brake leak to a level that would not hold the train stationary.

Second bullet point reads as follows:

- Increase the length of time that equipment is removed from a source of compressed air, which can negatively impact the integrity and operation of the brake system on a vehicle or train:

Yes. Should the locomotives be shutdown, which would stop operation of the air compressors, this would stop the supply of compressed air into the trains' air braking system. However, such a shutdown would have no effect on the train's operation unless the train is off air for more than four hours. After being off air for more than four hours railroad rules and federal regulations require the trains' air brake system be retested as per the requirements of a Class 1 brake test.

However, I do not foresee a negative impact of the integrity and operation of the trains' air braking system on any vehicle in the train. It is true, after a period of time when a train is left without a supply of compressed air; the trains' air brakes must be retested. It is reasonable to believe under most scenarios where the trains' air brakes are retested a particular vehicle (railcar) will function properly as when the train initially stopped. Furthermore, in such scenarios when a vehicles' air brake is found to be defective during a retest it would increase the integrity and safe operation of the railroad by gaining knowledge of defective equipment in the train.

Third bullet point reads as follows:

- Create time delays when restarting a locomotive where it is necessary to allow the airbrake systems to re-charge after the locomotive is shut down:

Railroad Air Brake and Train Handling Rules already instruct locomotive engineers to apply the train air brake system when stopped, thereby creating a measurement of time to replenish air into the trains' air brake system before departing. This is a railroad requirement during most any scenario despite any proposed rule changes. This is true whether or not the locomotives are idling. It is my opinion any additional re-charging time would be minimal and if necessary, could be handled through improved communication between the train and the dispatch center.

Addressing restarting of a locomotive, it is not a big deal. It only consumes a few minutes of time. Furthermore, once a locomotive is restarted and has begun replenishing air to the train the train crew could restart other locomotives during the aforementioned built-in waiting time.

Fourth bullet point reads as follows:

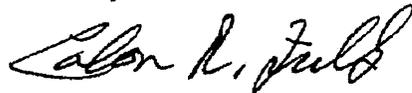
- Increase safety risks to railroad employees who will be required to manually set and release handbrakes:

Railroads hire railroad employees to perform railroad duties. The manual setting and releasing of handbrakes is a function of a railroad train service employees duties. The rail industry has addressed the proper and safe manner for which employees set and release handbrakes, on various types of rail equipment, in numerous rules, special instructions and safety rules. I find it surprising that the rail industry or the FRA even suggest that applying handbrakes on rail equipment causes an increased risk to railroad workers.

This should be considered a non-issue.

It is my opinion the application of the aforementioned SCAQMD rule requirements would not interfere with a railroads operations. Yes, as with any requirement, inadequate training and poor planning normally has an adverse affect on the railroads operation. However, considering the rail industries already fuel conservation mind-set I believe this to be beneficial from an environmental and/or financial standpoint.

Sincerely;



Colon R. Fulk
Railex, Inc.

Exhibit 6



South Coast
AQMD

South Coast Air Quality Management District

21865 Copley Drive, Diamond Bar, CA 91765-4178
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Office of the General Counsel

Writer's Direct Dial:

909.396.2302

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November 14, 2013

Via Electronic and U.S. Mail

Mr. Jared Blumenfeld
Regional Administrator
U.S. Environmental Protection Agency, Region 9
75 Hawthorne Street
San Francisco, CA 94105

Re: Letter dated September 27, 2013 from the Federal Railroad Administration to Jared Blumenfeld, Regional Administrator, EPA, Region 9

Dear Mr. Blumenfeld:

This letter is in response to the letter dated September 27, 2013 from the Federal Railroad Administration (FRA) to EPA Region 9 (Attachment 1) regarding two locomotive idling rules submitted to Region 9 for inclusion in the California State Implementation Plan. These rules were adopted by the South Coast Air Quality Management District (SCAQMD), the regional agency responsible for air pollution control for all sources except motor vehicles in the greater Los Angeles region. Apparently, the FRA was contacted by the Association of American Railroads to express concerns regarding the rules. Since the SCAQMD was not included in these discussions, we wanted to bring some facts to your attention which addresses the concerns raised by FRA.

We would also like to provide you with some background information that puts the FRA letter in context. The FRA, unfortunately, was apparently not presented with the extensive information presented by the SCAQMD at trial, including expert testimony, demonstrating that the rules do not interfere with rail operations.

Background

The two rules adopted by SCAQMD are very simple. Rule 3501 merely requires the railroads to keep simple records of idling events of 30 minutes or more and to file specified reports. It does not raise any of the concerns identified in the FRA letter. Rule 3502 requires the railroads to limit idling to no more than 30 minutes in certain circumstances. These circumstances were carefully described and limited so as to avoid interfering with normal rail operations, while preventing unnecessary idling. First, idling is limited to 30 minutes when a train is *unattended*,

and the crew has been relieved or has left for a meal, the locomotive is queuing for fueling, maintenance, or servicing; the train is in the railyard, or maintenance or diagnostics are being performed that do not require the engine to operate. Rule 3502(d)(1). The second circumstance applies to *trailing locomotives only* (the lead locomotive may continue to idle). Furthermore, it applies only when the train is notified of a delay that will exceed 30 minutes, or there is a locomotive breakdown that will result in a delay of more than 30 minutes. Rule 3502(d)(2). Exceptions from both idling prohibitions exist for emergency operations, cases when temperatures are expected to be at 40 degrees or lower (to protect engine coolant from freezing), or when idling is required to maintain battery charge or voltage. Rule 3502(j).

FRA CONCERNS

Potential confusion between CFR definition of “unattended equipment” and Rule 3502 definition of “unattended”

As described above, Rule 3502 limits idling to 30 minutes in certain circumstances when the locomotive is “unattended.” Rule 3502 defines “unattended” as follows: “UNATTENDED means where no crew member is on board a locomotive.” There is also a definition of “unattended equipment” in 49 C.F.R. §232.103 (General requirements for all train brake systems). Subdivision (n) of §232.103 provides in pertinent part that “A train’s air brake shall not be depended upon to hold equipment standing unattended on a grade (including a locomotive, a car, or a train whether or not locomotive is attached).” That subdivision goes on to provide: “For purposes of this section, ‘unattended equipment’ means equipment left standing and unmanned in such a manner that the brake system of the equipment cannot be readily controlled by a qualified person.” These two provisions may differ slightly. The Rule 3502 definition applies anytime no person is on board the locomotive. The CFR provision may allow equipment to avoid being identified as “unattended” even if no one is physically on board the locomotive if a person could readily control the brakes—perhaps if the person is standing immediately outside the locomotive cab. However, there should be no confusion created, because the two definitions serve different purposes.

Under Rule 3502, an unattended locomotive triggers the obligation to limit idling to 30 minutes under certain circumstances. Under 49 C.F. R. §232.103(n), air brakes may not be relied upon to secure “unattended equipment” on a grade. Thus, “unattended equipment” on a grade must be secured with hand brakes, *whether or not the train is idling*. On the other hand, if there is no one aboard the locomotive, and one of the circumstances listed in Rule 3502 occurs, then the train must limit idling to 30 minutes. But this requirement does not have any impact on train operations until the train has been unattended for 30 minutes – it must then cease idling. Since the definitions serve entirely different purposes there should be no confusion.

Concern that the rules can increase the length of time that equipment is removed from a source of compressed air

The railroads have argued that if the train is entirely shut down due to the idling limits, and does not obtain air from some other source such as yard air, at some point the air brakes begin to fade. First, it should be noted that in most cases when the train is away from the yard, the lead

locomotive may continue to idle under Rule 3502(d)(2). Thus, there will be no effect on the air brakes. Also, under federal regulations, the air brakes do not even need to be tested until the train has been shut down for more than four hours. 49 C.F.R. § 232.205(a)(3). Therefore, the mere stopping of idling after ½ hour will have no effect on the air brakes unless the train is off air for more than four hours. Moreover, the SCAQMD presented expert testimony at trial that the air brakes remain operational far longer than this four hour period. But to be conservative, we will assume that the train should not be left off air for more than 4 hours since that would trigger an air brake test. The railroads have never presented any evidence of the possibility of the train being left off air for more than four hours having a significant impact on their operations. Moreover, all that they need to do to avoid this potential is to return to the locomotive before the four hours is up and restart the engine. In most cases, as where the train is in the yard, it would be easy to re-start the engine before the four hours expire. The idling limit would no longer apply because the train would not be unattended. Therefore, the rule will have no impact on the ability to avoid having to do a brake test.

Concern that the rule could create time delays due to the need to allow time to re-charge the brakes after a shutdown

As noted above, there presumably is no need to re-charge the brakes if they are left off air for four hours or less. If the four hours limit before a brake test is required is approaching, a qualified crew member may re-board the train so that the locomotive is no longer “unattended” and the idling limits no longer apply. Thus the engine can be restarted and idled as long as deemed necessary for the protection of the air brakes.

Concern re safety risk to crew who will be required to manually set and release handbrakes

The obligation to set hand brakes occurs whenever the equipment is left unattended on a grade, *even if it is idling*. Moreover, at least BNSF has internal rules that require the use of handbrakes whenever the train is left unattended, even if it is not on a grade – again even if it is idling. BNSF Rule 102.1; 102.11 (Attachment 2). Therefore, the requirement to limit idling to one-half hour when the train is unattended will have no impact on the obligation to set and release handbrakes.

Reasonableness of 30-minute idling limits

The railroads have simply failed to present any cogent argument that a 30 minute limit on idling will unreasonably interfere with their operations. In fact, EPA’s idling equipment rule for locomotives provides that anti-idling devices must be set for a period of 30 minutes *or less*. 40 C.F.R. §1033.115(g)(1). We understand that a major manufacturer of aftermarket anti-idling equipment already sets its devices at 15 minutes. Moreover, Massachusetts already has a regulation limiting idling of diesel locomotives to 30 minutes, which has been approved by EPA into the state implementation plan and enforced by the Department of Justice. (See Attachment 3 - EPA news release.) Together with the carefully-drawn provisions of Rule 3502, we believe these facts support the position that a 30 minute limit on idling does not unreasonably interfere with rail operations.

Mr. Jared Blumenfeld
United States Environmental Protection Agency
November 14, 2013
Page 4

Conclusion

We note the fact that the FRA letter recognizes that there may be a compelling interest in applying the SCAQMD rules to the freight railroads in our region. We believe the interests in helping attain federal clean air standards, reducing exposure to cancer-causing diesel emissions, and protecting citizens from the nuisance and health impacts of excessive idling certainly justify applying these rules.

Respectfully submitted,



Barbara Baird
Chief Deputy Counsel
South Coast Air Quality Management District

BB:pa

e/BB/Railroads/FRA Second Response

Attachments: 1) Letter dated 9/27/13 from FRA to EPA
2) Air Brake and Train Handling Rules No. 3
3) EPA News Release dated August 4, 2010

cc: Mr. Joseph Szabo, FRA Administrator

Ms. Elizabeth Gross, Trial Attorney
Office of Chief Counsel, FRA

ATTACHMENT 1



U.S. Department
of Transportation

Administrator

1200 New Jersey Avenue, SE
Washington, DC 20590

**Federal Railroad
Administration**

SEP 27 2013

Mr. Jared Blumenfeld
Regional Administrator
United States Environmental Protection Agency
Region 9
75 Hawthorne Street
San Francisco, CA 94105

Dear Mr. Blumenfeld:

This letter is regarding the two proposed locomotive idling rules submitted to your office on August 30, 2012 by the California Air Resource Board (CARB) on behalf of the South Coast Air Quality Management District for inclusion in California's State Implementation Plan (SIP). The Association of American Railroads (AAR) has reached out to us about the proposed rules and provided us with some background materials and associated correspondence.

As you know, AAR has advanced a number of concerns with the two proposed locomotive idling rules, including that the proposed rules open the door to a patchwork of regulatory requirements throughout California, making industry compliance more difficult. While FRA does not have regulations specifically covering the subject matter of idling locomotives, I would like to take this opportunity to alert you to a few important safety and operational considerations related to the proposed CARB restrictions on locomotive idling. The proposed rules have the potential to:

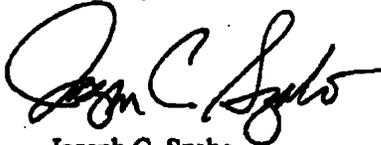
- Cause confusion because the CARB proposed rules define "unattended" in a manner that potentially conflicts with FRA's definition of "unattended equipment" in 49 CFR 232.103(n);
- Increase the length of time that equipment is removed from a source of compressed air, which can negatively impact the integrity and operation of the brake system on a vehicle or train;
- Create time delays when restarting a locomotive where it is necessary to allow the airbrake systems to re-charge after the locomotive is shut down; and
- Increase safety risks to railroad employees who will be required to manually set and release handbrakes.

In providing this information, I understand that the decision on whether to adopt the two proposed rules ultimately rests with you and that there may be other compelling interests

that factor into your decision. We would be happy to discuss the safety and operational issues mentioned above with you if that would be helpful in informing your decision.

Thank you for considering this request and please contact Elizabeth Gross at (202) 493-1342 if you should have any questions or wish to discuss the issue further.

Sincerely,

A handwritten signature in black ink, appearing to read "Joseph C. Szabo". The signature is written in a cursive style with a large initial "J" and "S".

Joseph C. Szabo
Administrator

ATTACHMENT 2

BNSF Safety Vision

We believe every accident or injury is preventable. Our vision is that Burlington Northern Santa Fe will operate free of accidents and injuries. Burlington Northern Santa Fe will achieve this vision through:

A culture that makes safety our highest priority and provides continuous self-examination as to the effectiveness of our safety process and performance ...

A work environment, including the resources and tools, that is safe and accident-free where all known hazards will be eliminated or safe-guarded ...

Work practices and training for all employees that make safety essential to the tasks we perform ...

An empowered work force, including all employees, that takes responsibility for personal safety, the safety of fellow employees, and the communities in which we serve.

Introduction

This version contains the following revised or added pages:

July 11, 2004: 3, 4, 19, 20, 25, 26, 27, 28, 29, 30, 31, 32, 37, 38, 43, 44, 45, 46, 51, 52, 53, 54, 55, 56, 75, 76, 89, 90, 93, 94.

April 3, 2005: 7, 8, 13, 14, 15, 16, 16a added, 16b added, 17, 18, 21, 22, 33, 34, 35, 36, 59, 60, 63, 64, 117, 118.

June 8, 2005: 5, 6.

June 24, 2005: Title Page, 2, 9, 10.



Air Brake and Train Handling Rules

No. 3

IN EFFECT AT 0001
Central, Mountain and Pacific
Continental Time

Sunday, July 13, 2003
(including revisions up to
June 24, 2005)

102.0 Train Operations

102.1 Securing Equipment Against Undesired Movement

Crew members are responsible for securing standing equipment with hand brakes to prevent undesired movement. The air brake system must not be depended upon to prevent an undesired movement.

Use the following steps to determine the hand brakes to be applied when setting out cars on a grade:

- With slack bunched, apply the hand brakes on the low end of the cut of cars.
- With slack stretched, apply the hand brakes on the high end of the cut of cars.

To determining the number of hand brakes to be applied depends on:

- Grade and adhesion.
- Number of loaded and empty cars.
- Weather conditions (wind and temperature).

Note: Reference Rule 104.14 for hand brake guidelines.

To verify the hand brake(s) applied will prevent movement, release all air brakes. Note: All retainer valves must be in EXHAUST position

102.1.1 Securing an Unattended Train or Portion of Train with Locomotive Attached

To secure a train or a portion of a train with the lead locomotive consist attached, perform the steps below:

1. Secure equipment against undesired movement. When securing an unattended train, in addition to hand brakes required to secure train, all locomotive hand brakes on the lead consist must be applied. When determining the minimum number of had brakes required to secure a train, the locomotive hand brakes should be counted toward the total hand brakes required. Use the table provided in Rule 104.14 if the minimum number required is not known.

Exception: Distributed power remote consists coupled to unattended trains do not require hand brakes to be applied or other securement steps outlined in Rule 102.3 when the train is otherwise properly secured.

2. Release all air brakes to ensure hand brakes will prevent movement.
3. Secure the locomotive consist as outlined in Rule 102.3, items 1 - 10.

102.1.2 Securing Train Before Detaching Locomotives

When any part of a train is left standing and train brake inspection is not required, do not depend on the air brake system to secure the cars.

When detaching locomotives or locomotives and cars:

1. Secure equipment against undesired movement. Exception: Use the table provided in Rule 104.14 if the minimum number required is not known or if releasing air brakes to test for sufficient hand brakes is not practical (i.e. only rear of train being left unattended).
2. Release all air brakes to ensure hand brakes will prevent movement.
3. Make a 20-psi brake pipe reduction.
4. Close angle cock on rear locomotive or last car to be detached from portion left standing. Leave angle cock open on portion left standing.
5. Allow brakes on any standing portion to apply in emergency. When available, use the end-of-train telemetry device to make sure that brake pipe pressure drops to 0 psi.
6. Do not bottle air or maintain air pressure in the brake pipe when locomotives are detached or yard air is uncoupled. However, after the brake pipe pressure has completely exhausted, the angle cock on the standing portion of the train may be closed to allow a locomotive to switch the cars from the opposite end.

Exception: When separating a train in temperatures below 25 degrees F and the train is on a light grade, (see Glossary) follow the steps in Rule 100.17 (Inbound Train Inspection) to prevent vent valves from sticking open.

102.2 Releasing Hand Brakes

Before moving cars or locomotives, fully release all hand brakes to prevent wheel damage.

If a hand brake is difficult to release, charge the air brake system and make a full service application of the car or locomotive brakes before attempting to release the hand brake again. If hand brake is still difficult to release place the car or locomotive brake system into emergency.

If the hand brake cannot be released using the above method do not move the car except to set it out. Car must be watched during entire movement to set out and limit speed to 5 MPH if wheels are not turning freely. Report defect to Mechanical Desk/Dispatcher.

When releasing hand brakes, check at least three additional cars beyond the last applied hand brake to ensure that no other hand brakes are applied.

102.3 Unattended Locomotive(s)

When securing locomotives (excluding DP remote locomotives on secured unattended trains):

1. Place the throttle in IDLE unless you are protecting the engine from freezing (see Rule 106.2, Winterization of Locomotives).
2. Place the transition handle (if equipped) in the OFF position.
3. Place the generator field switch or the circuit breaker on the control stand (if equipped) in the OFF position.
4. Remove the reverser handle from the reverser slot on the control stand and place it in the receptacle, if equipped. Do not remove the reverser handle if you need to increase the throttle position to prevent freezing.
5. Apply all hand brakes.
6. Release the air brakes to determine the hand brakes will prevent movement.
7. Make a 20-psi brake pipe reduction after allowing the brake system to charge.
8. Leave the automatic brake valve cut in.
9. Fully apply the independent brake.
10. Place engine control switch to ISOLATE on all locomotives unless conditions require winter protection as prescribed by Rule 106.2 and Rule 106.6.

Additional securement guidelines for unattended locomotives not coupled to other equipment:

11. Must not be left unattended on a main track.
12. When left unattended on auxiliary tracks must be protected by derail(s) or a facing point switch lined and locked to prevent movement to the main track.
13. If the grade exceeds 1 percent, block the wheels securely.

Exceptions: DP remote locomotives and single person helper consists may be left standing with all hand brakes applied at any location, even on the main track, when in the process of making up a DP train or when single person helper is performing duties that require temporarily leaving the locomotives.

At mechanical facilities, when locomotives are protected by outbound derails on designated servicing tracks, apply a sufficient number of hand brakes to prevent undesired movement, but a minimum of one per locomotive consist.

ATTACHMENT 3



Newsroom
News Releases from Region 1

MBTA to Spend Millions to Reduce Commuter Train Emissions in Clean Air Act Settlement

Release Date: 08/04/2010
Contact Information: EPA, David Deegan, (617) 918-1017 DOJ, (202) 514-2007

Joint News Release
U.S. Environmental Protection Agency, New England Regional Office
Department of Justice

(Boston, Mass. – Aug. 4, 2010) – In response to a federal enforcement action for excessive train engine idling, the Massachusetts Bay Transportation Authority (MBTA) and the Massachusetts Bay Commuter Railroad Company (MBCR) will spend more than \$2 million to reduce diesel locomotive emissions throughout the MBTA's commuter rail system, the Justice Department and Environmental Protection Agency (EPA) announced today.

Under a consent decree lodged in federal court, MBTA and MBCR will spend over \$1 million on anti-idling equipment at all end-of-line stations and maintenance facilities, and will spend another \$1 million on ultra-clean diesel fuel for all trains in the commuter rail system for two years.

These emission-reducing measures are the result of a federal enforcement action brought by the Justice Department on behalf of EPA in response to MBTA's and MBCR's excessive locomotive idling at the Widett Circle layover facility in South Boston and the Greenbush line station in Scituate, Mass. Neighboring residents have complained of excessive train idling at both locations.

To settle the enforcement action, MBTA and MBCR will:

- Install or upgrade electric plug-in stations as anti-idling equipment to supply all commuter locomotives with electric auxiliary power to prevent excess idling during train layovers;
- Switch to cleaner burning, ultra-low sulfur diesel fuel for all trains on the MBTA's commuter rail lines for a two year period at an estimated cost of \$1 million;
- Install new, less polluting auxiliary engines on fourteen commuter locomotives by no later than December 2012; and
- Pay a \$225,000 fine.

The anti-idling measures, clean diesel fuel switch, and new auxiliary engines required by the federal settlement will have significant clean air benefits. For example, a reduction in commuter locomotive idling by even one hour per day per locomotive, together with the fuel switch and new engines, could result in yearly carbon dioxide emission reductions of an estimated 800 tons, nitrogen oxides reductions of nearly 170 tons, carbon monoxide reductions of about 80 tons, particulate reductions of 23 tons, and sulfur dioxide reductions of 1-2 tons.

MBTA owns 80 commuter locomotives used on 13 commuter rail routes in Eastern Massachusetts. Since 2003, MBCR has managed and operated the commuter train system for the MBTA. The system includes 14 layover facilities where the locomotives and passenger cars are parked and serviced between runs. Electric plug-in stations at these facilities supply the trains with electric power for lights and ventilation. If a plug-in is not available, a train on layover idles its auxiliary diesel engine to supply any needed electric power.

Under today's settlement, which must be approved by the court, commuter train layovers will only be allowed at locations where there are sufficient electric plug-in stations for all trains.

The Massachusetts locomotive idling regulation, a federally-enforceable state regulation, prohibits all unnecessary diesel locomotive idling for more than 30 minutes. According to a 2008 notice of violation

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- 09/18/2012 [EPA Proposes Two Massachusetts Sites to be Added to National Superfund List](#)
- 09/14/2012 [Motorcycle Importer Pays Penalty to Resolve Clean Air Violations](#)

issued by EPA, MBTA and MCR committed 33 violations of this regulation at Widett Circle and Greenbush in three months. At Widett, the average idling time during the violations was just under four hours (234 minutes).

"This precedent-setting, multi-million dollar settlement for train idling is appropriate in light of the defendants' conduct," said Ignacia S. Moreno, Assistant Attorney General for the Justice Department's Environment and Natural Resources Division. "The settlement will provide immediate and lasting environmental benefits to the residents of Eastern Massachusetts, particularly those in environmental justice communities."

"It is imperative that anti-idling laws are followed, given the proximity of these layover facilities to densely-populated communities and environmental justice neighborhoods," said Curt Spalding, regional administrator of EPA's New England Office. "Diesel pollution can be very harmful, especially to sensitive populations such as the young, elderly and people who suffer from asthma."

Diesel emissions contribute to a number of serious air pollution problems such as smog, acid rain and increased carbon concentrations in the atmosphere. Diesel exhaust contains fine particles that can cause lung damage and aggravate respiratory conditions, such as asthma and bronchitis. Based upon human and laboratory studies, there is also considerable evidence that diesel exhaust is a likely carcinogen.

Since 2002, EPA has brought more than a dozen federal enforcement cases to stop diesel engine idling violations in Mass., Conn. and R.I. Most of the cases have involved diesel truck and bus idling, including a judicial settlement announced in July 2010 against National Car Rental for shuttle bus idling at two airports. Only Massachusetts and Rhode Island have federally-enforceable locomotive idling regulations, and today's action marks the first time EPA and DOJ have sued a railroad for excessive idling violations.

More information:

The consent decree, lodged in the U.S. District Court, will be subject to a 30-day public comment period and approval by the federal court. Once it is published in the Federal Register, a copy of the consent decree and instructions on how to comment will be available on the Justice Department Web site at (http://www.usdoj.gov/enrd/Consent_Decrees.html).

Fact Sheet on MBTA Settlement: <http://www.epa.gov/region1/enforcement/air/pdfs/CAA-MBTA-MCR-Fact-Sheet.pdf>

Diesel exhaust and anti-idling guidelines (www.epa.gov/na/eco/diesel)

###

Last updated on Tuesday, September 28, 2010 at <http://www.epa.gov/opa/admpress.nsf/6d651d23f5a91b768525735900400c28b89a1cd70da60b968525777500815ce71?OpenDocument>

**BEFORE THE
SURFACE TRANSPORTATION BOARD**

UNITED STATES ENVIRONMENTAL)	
PROTECTION AGENCY – PETITION FOR)	Finance Docket No. 35803
DECLARATORY ORDER)	
)	

**SUPPLEMENTAL COMMENTS
OF THE
SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT**

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**BEFORE THE
SURFACE TRANSPORTATION BOARD**

UNITED STATES ENVIRONMENTAL)	
PROTECTION AGENCY – PETITION FOR)	Finance Docket No. 35803
DECLARATORY ORDER)	
)	

**SUPPLEMENTAL COMMENTS OF THE
SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT**

In accordance with the Board’s Order served on February 26, 2014 in this proceeding, the South Coast Air Quality Management District (the “District”) submits these Supplemental Comments on the issues raised by the January 24, 2014 Petition for Declaratory Order filed by the U.S. Environmental Protection Agency (“EPA”) (“Petition”).

INTRODUCTION

A description of the District and its interests in this proceeding are included in its February 14, 2014 Reply to the EPA Petition. Therein, the District also provided evidence and legal argument demonstrating clearly that the Board should grant the Petition, and issue a declaratory order confirming that District Rules 3501 and 3502 would not be preempted by the Interstate Commerce Commission Termination Act of 1996, 49 U.S.C. § 10101 *et seq.* (“ICCTA”), once they are incorporated by EPA into the California State Implementation Plan (“SIP”) under the Clean Air Act, 42 U.S.C. § 7401 *et seq.* (“CAA”).

In these Supplemental Comments, the District offers additional and updated evidence and further details the arguments and legal authorities that support the harmonization of Rules 3501 and 3502 with the ICCTA, and the conclusion that their enforcement as part of the California SIP neither directly regulates railroad operations, nor unreasonably interferes with interstate commerce. The District also explains why the contrary positions advanced in the February 14, 2014 Replies filed by the Association of American Railroads (“AAR Reply”), BNSF Railway Company (“BNSF Reply”), Union Pacific Railroad Company (“UP Reply”) and Norfolk Southern Railway Company (“NS Reply”)¹ are without merit, and cannot justify the Board taking the unprecedented step of declaring that a federal environmental law – which a SIP that includes the Rules would be – is preempted by the ICCTA.

The District reserves the right to respond further to any additional comments or arguments that may be presented by the Railroads or other parties, on or before the date set by the Board for the submission of Reply Comments, which currently is April 14, 2014.

¹ AAR, BNSF, UP and NS sometimes are referred to herein as the “Railroads.”

PRELIMINARY MATTERS

The District respectfully reiterates its previously-stated position that EPA's request to the Board for advice on the harmonization of a California SIP that includes Rules 3501 and 3502 with the ICCTA was not legally necessary. The decision whether to approve the request of the California Air Resources Board ("CARB") to modify the SIP by incorporating the Rules is the responsibility and prerogative of EPA under its own enabling statute; the ICCTA does not establish any role for the Board in that determination.² EPA's Petition reflects that it was filed in furtherance of its deliberations under 42 U.S.C. § 7410(a)(2)(E)(i),³ and the District's participation is for the purpose of assisting the Board in responding to this advisory request, and ensuring that the public health rights and interests of the 16 million citizens who live and/or work within the boundaries of the South Coast Air Basin are represented in this proceeding. As a matter of law, however, authority and responsibility for determining whether the Rules should be enforceable parts of the California SIP rest with EPA.

A second point of clarification which should be established at the outset concerns the legal standard that the Board should apply in considering EPA's Petition. Not surprisingly,⁴ the Railroads urge that the Board evaluate Rules 3501 and 3502 as if

² See CARB Reply at 1-2.

³ Petition, at 5.

⁴ As the District pointed out in its Reply (at 21, 26, 37-39) and further demonstrates in these Supplemental Comments, the Railroads voluntarily employ idling reduction strategies that are similar if not identical to those that are the subject of the Rules, generally in furtherance of their own interests in improved fuel efficiency. Viewed from a broader perspective, it seems clear that their principal motivation for opposing inclusion

they were local ordinances subject to standard state vs. federal preemption analysis under 49 U.S.C. § 10501.⁵ While lip service is paid to the principle that federal enactments must be harmonized,⁶ the Railroads' core argument appears to be that any influence on a carrier's idling practices constitutes interference that warrants preemption,⁷ and that the Board should accept the 2007 decision of the U.S. District Court for the Central District of California⁸ as dispositive on the issue.⁹ However, the court's rulings in *AAR v. SCAQMD* have *no* precedential impact for purposes of this proceeding.

As discussed in further detail in the District's Reply and in Part II, *infra*, the District Court's 2007 reasoning and preemption analysis was predicated *specifically* on the finding at the time that the District's Rules were not proposed under the CAA, which would have required a harmonization approach to the Railroads' claims of conflict with the ICCTA. *See AAR v. SCAQMD* at *5-6. Judge Walter therefore applied the standard test for preemption of local regulations that impact railroad activities governed by the ICCTA (the same test that the Railroads advocate here). *Id.* at *7. As the Ninth Circuit's

of the Rules in the California SIP springs not from a concern over operational interference or a burden on commerce, but rather from a desire to avoid mandatory emissions limitations of any kind. However, questions of preemption or the harmonization of federal laws should not turn on the Railroads' preferences.

⁵ *See* AAR Reply at 4, 13-14, 19; BNSF Reply at 15-17, 23.

⁶ *E.g.*, AAR Reply at 25-26; BNSF Reply at 23-25.

⁷ *E.g.*, AAR Reply at 14-15; BNSF Reply at 15-16; UP Reply at 16-18.

⁸ *Ass'n of Am. R.R. v. S. Coast Air Quality Mgmt. Dist.*, No. CV 06-01416-JFW, 2007 WL 2439499 (C.D. Cal. Apr. 30, 2007) ("*AAR v. SCAQMD*").

⁹ AAR Reply at 12, 14-15; BNSF Reply at 16; UP Reply at 16-17.

decision on review made clear, however, once the Rules are part of an EPA-approved SIP, and have the force of federal law,¹⁰ a very different standard applies, one which requires the Board “to harmonize the District’s rules with ICCTA.” *Ass’n of Am. R.R. v. S. Coast Air Quality Mgmt. Dist.*, 622 F.3d 1094, 1098 (9th Cir. 2010) (“*Association of American Railroads*”). *Inter alia*, this involves both a presumption that the later-enacted ICCTA should not be interpreted to limit by implication the reach of the CAA,¹¹ and a standard that places the District’s Rules “outside the scope of § 10501(b) preemption, unless the [CAA is] being used to regulate rail operations or being applied in a discriminatory manner against railroads.” *Grafton & Upton R.R. Co. – Petition for Declaratory Order*, STB F.D. No. 35779 at 6 (STB served January 27, 2014) (“*Grafton*”).¹² As shown in the District’s Reply, the proper scope of the Board’s inquiry into whether the CAA is being used to “regulate rail operations” is whether the Rules intrude on matters *directly* regulated by the Board (*e.g.*, railroad rates, routes, construction, etc.), or whether they impose an unreasonable burden on railroad operations as a matter of actual fact. *See* District Reply at 14-15; *Grafton* at 4, 6. As further

¹⁰ *Safe Air for Everyone v. EPA*, 488 F.3d 1088, 1091 (9th Cir. 2007).

¹¹ *Nat’l Ass’n of Home Builders v. Defenders of Wildlife*, 551 U.S. 644, 662 (2007).

¹² The proper standard also precludes reliance on any of the District’s Court’s “factual” findings regarding the Rules, as Judge Walter by his own admission made no effort to harmonize the Rules with the ICCTA. As he opined before turning to a discussion of the trial record, “[a]s a result of the Court’s finding that the District did not derive its authority...from the CAA, the Court need not ‘harmonize’ or reconcile the ... ICCTA with the mandates of the CAA.” *AAR v. SCAQMD* at *6.

demonstrated in these Supplemental Comments, when this standard is applied properly the Rules are fully enforceable as part of the California SIP.

Third, the Railroads' suggestion that inclusion of the Rules in the SIP is simply a "pretext" to be ignored¹³ should be dismissed summarily. When the Board has used the term "pretext" in evaluating a state or local agency's reliance on environmental law, the context has been one in which the agency was invoking federal law "to permit local communities to hold up or defeat the railroad's right to construct facilities...." *Joint Petition for Declaratory Order – Bos. & Me. Corp. and Town of Ayer, MA*, 5 S.T.B 500, 509 (2001). In that case, the Board concluded that the Town was using environmental statutes "as a pretext to do what Congress expressly precluded: interfere with interstate commerce by imposing a local permitting or environmental process as a prerequisite to the railroad's ability to conduct its operations." *Id.* Significantly, there was no SIP or other federal action at issue there, and the record reflected reasons to doubt the Town's motives, chief among them the fact that the state environmental agency had found that the new facility posed no threat to the local water supply. *See id.* The lesson drawn from that portion of the Board's decision and others like it is that where a state would be preempted from imposing permitting or preclearance requirements (also referred to as "prior restraints") on a railroad's operations, federal environmental laws may not be used

¹³ *See* BNSF Reply at 21; AAR Reply at 18. The Railroads cite to a footnote in the District Court's decision (*AAR v. SCAQMD* at *6 n.6) that mistakenly stated that the CAA was "never mentioned" during the District proceedings in which the Rules were developed. As shown in the District's Reply (*see, e.g., Wallerstein V.S.*, p. 10), this is factually incorrect.

as a “pretext for frustrating or preventing” that activity, at least where there is strong evidence that no actual threat to the environment existed. Nevertheless, the Board affirmed that in general, “nothing in section 10501(b) is intended to interfere with the role of state and local agencies in implementing Federal environmental statutes, such as the Clean Air Act....” 5 S.T.B. at 508. In stark contrast, the present case involves no preclearance, permitting or prior restraint, and the state agency (CARB) supports the Rules as an important component of California’s policy initiatives to achieve clean air. The staff reports prepared in connection with the Rules’ adoption explained the particulate matter (“PM”) and nitrogen oxide (“NOx”) emissions reductions that were expected to result,¹⁴ and the adoptive resolution itself references the need for the Rules to help meet state and *federal* ambient air quality standards,¹⁵ including those under the CAA.

Finally, the Board properly must reject AAR’s and UP’s gymnastic reading of the CAA,¹⁶ and address EPA’s Petition based on the assumption that the Rules are part

¹⁴ See District Reply, Wallerstein V.S. at 10.

¹⁵ *Id.*, Nakamura V.S., Exh. 3 at 4.

¹⁶ See AAR Reply at 19-20; UP Reply at 14-16. Their circular and result-oriented argument (that the acknowledged legal effect of including the Rules in the SIP should be ignored because of the District Court’s conclusion regarding the status of the Rules *before* they are part of the SIP) creates a classic “Catch-22”, and completely ignores the Ninth Circuit’s ruling that EPA could adopt the Rules into the SIP and thereby qualify them for a harmonizing analysis. 622 F.3d at 1098. It also is contradicted by the representation of the Railroads’ own counsel before that court. See District Reply at 6-7.

of the California SIP.¹⁷ That is the context in which EPA posed its question,¹⁸ and it is consistent with the plain language of the CAA, which provides that a SIP shall:

[P]rovide [] necessary assurances that the State (or, except where the Administrator deems inappropriate, the general purpose local government or governments, or a regional agency designated by the State or general purpose local governments for that purpose) *will* have adequate personnel, funding and authority under State (and, as appropriate, local) law to carry out such implementation plan (and is not prohibited by any provision of Federal or State law from carrying out such implementation plan or portion thereof).

42 U.S.C. § 7410(a)(2)(E) (emphasis added).

Appellate decisions construing the statutory language confirm that its focus is on the enforceability of provisions *following* their inclusion in a SIP, not before. *See, e.g., Env'tl. Def. v. EPA*, 369 F.3d 193, 208-209 (2nd Cir. 2004) (Section 7410(a)(2)(E) found satisfied even though the state agency had to complete a post-SIP rulemaking in order to adopt the required measures); *Ober v. EPA*, 84 F.3d 304, 312 (9th Cir. 1996) (state law included contingency provisions to allow changes in enforcement options). *See also, Am. Petroleum Inst. v. Jorling*, 710 F.Supp. 421, 433 (N.D. N.Y. 1989). California law currently vests the District with authority to enforce the SIP within its boundaries, as part of its mandate to “enforce all applicable provisions of state and federal law” respecting air emissions. *See* CAL. HEALTH & SAFETY CODE (“CHSC”) § 40001(a). *See also,*

¹⁷ *See Comments of U.S. EPA, U.S. EPA- Petition for Declaratory Order*, F.D. 35803 (Mar. 25, 2014) (“EPA Comments”).

¹⁸ Petition at 2 (the question posed is whether “the State would be prohibited under ICCTA from carrying out the Rules [3501 and 3502] if they were approved into the SIP.”).

CHSC §§ 41510-41513 and 42400, *et seq.* EPA has sought the Board’s advice regarding accommodation of the Rules as part of the SIP with the provisions of the ICCTA. Logic and the law compel an analysis that presumes the Rules have that status. *See* EPA Comments at 1-2.

ARGUMENT

I. Reducing Locomotive Emissions Is Essential to Public Health and Sound Public Policy for Southern California

The CAA and the ICCTA share common ground in the promotion of public health as a national legislative policy goal. The central purpose of the CAA is “to protect and enhance the quality of the Nation’s air resources so as to promote the health and welfare and the productive capacity of its population.” 42 U.S.C. § 7401(b)(1). The National Rail Transportation Policy goals adopted in the ICCTA include as a priority the operation of transportation facilities “without detriment to the public health and safety.” 49 U.S.C. § 10101(8). There are few regions of the country where these complementary imperatives are brought into sharper relief than the South Coast Air Basin.

For many years, the particular needs of the California South Coast Region for significant reductions in PM and NO_x have been highlighted by EPA.¹⁹ A key source of these pollutants in the Region are idling freight locomotives, due to the high concentration of rail freight traffic and railyard activity in the area. Diesel locomotive emissions contain dangerous levels of carcinogenic material, as confirmed by scientific

¹⁹ *See, e.g.*, Control of Emissions of Air Pollution from Locomotive Engines and Marine Compression-Ignition Engines less than 30 Liters per Cylinder; Republication, 73 Fed. Reg. 37,096, 37,101 (June 30, 2008) (Final Rule).

studies conducted by CARB, EPA and the International Agency for Research on Cancer (*see* District Reply at 8-9, Wallerstein V.S. at 9), and the South Coast Air Basin is home to several railyards which pose particularly high health risks. *Id.* As the District demonstrated in its Reply, the scientific case for a public policy initiative to further reduce diesel locomotive emissions in Southern California is compelling. *See* District Reply at 8, 23-24; Wallerstein V.S. at 4-7; Nakamura V.S. at 6-7.

Also beyond serious dispute is the fact that these adverse health impacts are felt most acutely by some of the most vulnerable among the residents of Southern California, including lower income citizens who lack the resources to relocate easily or the economic and/or political power to persuade the Railroads to take additional steps to reduce emissions voluntarily. The public policy imperatives implicated by these facts are confirmed by EPA's record of enforcement in other, similar circumstances. For example, in 2010, EPA and the Department of Justice negotiated a precedent-setting settlement for 33 incidents of excessive locomotive idling in violation of the Massachusetts SIP's provisions. The Justice Department stated: "The settlement will provide immediate and lasting environmental benefits to the residents of Eastern Massachusetts, particularly those in environmental justice communities." The EPA Regional Administrator elaborated: "It is imperative that anti-idling laws are followed, given the proximity of these layover facilities to densely-populated communities and environmental justice neighborhoods. ...Diesel pollution can be very harmful, especially to sensitive

populations such as the young, elderly, and people who suffer from asthma.”²⁰

According to EPA, low-income and/or minority residents in environmental justice communities are “often subject to multiple pollution sources and can be at greater risk for cumulative health impact.”²¹

As was documented in the Reply to EPA’s Petition filed by the East Yard Communities for Environmental Justice, from the time of initial development of the Rules by the District through the EPA’s own recent deliberative review, citizens who live close to the Southern California railyards consistently and persistently have provided evidence and testimony establishing both the magnitude of the emissions problem, and the fact that it has not been abated meaningfully by the Railroads’ voluntary actions. As mandated by the President’s 2011 Environmental Justice Memorandum of Understanding,²² consideration of the public policy implications of EPA’s proposed

²⁰ See Press Release, DOJ, Mass. Bay Transp. Auth. To Spend Millions to Reduce Commuter Train Emissions in Clean Air Act Settlement (Aug. 4, 2010) *available at* <http://www.justice.gov/opa/pr/2010/August/10-enrd-896.html> (Official Notice Tab, Exh. 1).

²¹ U.S. EPA, *Clean Air Act Settlement with the Mass. Bay Transp. Auth. (MBTA) & Mass. Bay Commuter R.R. Co. (MBCR) for Commuter Train Idling Violations*, U.S. EPA Fact Sheet 3 (Aug. 4, 2010), <http://www.epa.gov/region1/enforcement/air/pdfs/CAA-MBTA-MBCR-Fact-Sheet.pdf> (Official Notice Tab, Exh. 2).

²² See District Reply at 9-10. See also Mem. of Understanding on Env’tl. Justice and Exec. Order 12898 *available at* <http://epa.gov/environmentaljustice/resources/publications/interagency/ej-mou-2011-08.pdf> (Official Notice Tab, Exh. 3); *Obama Admin. Issues Env’tl. Justice MOU*, Ctr. for Effective Gov’t (Aug. 16, 2011), <http://www.foreffectivegov.org/node/11826> (MOU signed Aug. 4, 2011).

inclusion of the Rules in the California SIP (and the Railroads' opposition) must take these environmental justice impacts into account.

II. The District Has The Authority and Responsibility to Enforce the SIP

A. The District's Authority Extends to Enforcement of The Rules as Part of the SIP

The authority of the District to submit the Rules to CARB for proposed inclusion in the California SIP, and its power under California law to enforce them as part of the SIP, are not questions properly before the Board in this proceeding, or within the scope of the Board's jurisdiction under 49 U.S.C. §§ 721 or 10501.²³ However, both BNSF and UP have sought to muddy the waters by arguing that because District Judge Walter ruled that the District could not promulgate the Rules as local regulations and issued an injunction against them, the Rules should be deemed preempted by the ICCTA.²⁴ The Railroads are wrong on the law, and on the effect of Judge Walter's injunction. The District had full authority under California law to propose the Rules to CARB, and likewise has the power under state law to enforce them as part of the SIP.

California's air pollution control districts are responsible for promulgating and enforcing regulations to implement and promote the achievement of state and federal air quality standards. *See* CHSC § 40001. CARB expressly has confirmed that "[b]oth

²³ As discussed *supra*, for purpose of this declaratory order proceeding it must be taken as given that EPA has concluded both that public policy as reflected in the CAA supports inclusion of the Rules in the SIP, and that so long as they are not preempted by the ICCTA, they would be enforceable as part of the SIP.

²⁴ *See* BNSF Reply at 20-25; UP Reply at 15-16.

CARB and the districts have a role addressing railroad emissions, CARB under a specific authorization to address these emissions, *see* [CHSC] § 43013(b), and the districts under their general air pollution authority.” CARB Reply at 6-7. As the California Supreme Court has repeatedly held, CARB’s views on the proper interpretation of the statutes that it administers is entitled to great weight. *W. Oil & Gas Ass’n v. Monterey Bay Unified Air Pollution Control Dist.*, 49 C. 3d 408, 425 (1989), *quoting W. Oil & Gas Ass’n v. Air Resources Board*, 37 C. 3d 502, 520 (1984).

The “specific authorization” allowing CARB to regulate locomotives is in CHSC § 43013(b), which directs the agency to “adopt standards and regulations” for, *inter alia*, locomotive air emissions. However, that grant of authority by the California legislature did not impliedly preempt the District’s pre-existing authority to regulate non-vehicular sources, including locomotives, as any such preemption must be “specifically provided” in the statute. *See* CHSC § 41508. *See also, W. Oil & Gas Ass’n v. Monterey Bay*, 49 C. 3d at 422 (implied preemption of air district authority can only be found in cases of “undebatable evidence.”). Rule 3502 targets emissions, but it does not establish “standards” for reductions. As explained in Part III, *infra*, regulations limiting extended idling are not “standards” under the law. *Engine Mfrs. Ass’n v. EPA*, 88 F.3d 1075, 1093-1094 (D.C. Cir. 1996). Section 43013(b) deals with a different type of regulation than the Rules here, and the California Legislature cannot be presumed to have repealed by implication the air districts’ authority over such in-use regulations. Manifestly, there is no “undebatable evidence” of such an intent.

The Railroads attempt to rely on CHSC § 40702, which recognizes the air districts' general authority but states that their regulations may not “specify the design of equipment, type of construction, or particular method to be used in reducing the release of air contaminants from railroad locomotives.” The District’s Rules do not specify the design or construction of railroad equipment, or prescribe the method that railroads must employ to reduce emissions, nor do they require that locomotives meet any particular numerical standard. Indeed, railroads are given flexibility to comply in any manner that is feasible; *e.g.*, limit idling, utilize idling control technology, develop equivalency plans, etc. *See* Rule 3501(d), (f); Rule 3502(c), (d). CARB agrees that CHSC § 40702 is not violated by the District’s “in use” Rule,²⁵ which in fact mirrors the state in-use regulations upheld by the D.C. Circuit as *not* preempted by CAA § 209(e) in *Engine Mfgs. Ass’n*, 88 F. 3d at 1093.

The districts generally do not have authority over motor vehicles (CHSC § 40000), and their powers to regulate sources such as locomotives are limited (CHSC § 40702).²⁶ However, the latter limitations are not overly broad, and specifically address only the “design of equipment, type of construction, or particular method to be used” to reduce emissions from the locomotive. *See* CHSC § 40702. Significantly, general

²⁵ *See* CARB Reply at 7 n. 9.

²⁶ Locomotives are not motor vehicles, because they are not devices which move property “upon a highway,” and because they are used “upon stationary rails or tracks.” CAL. VEH. CODE § 670.

limitations on equipment *use* that do not include design or component mandates do not fall within these limits.

Also instructive on the question of the scope of the District's authority is the fact that in creating the District, the California Legislature granted it greater powers and broader jurisdiction than other air districts in the state,²⁷ in recognition of the "critical air pollution problems" afflicting the South Coast Basin. *See* CHSC § 40402(b). CHSC § 40402(b). Pursuant to CHSC § 40440, the District was directed to "adopt and enforce rules and regulations to achieve and maintain the state and federal ambient air quality standards in all areas affected by emission sources" under its jurisdiction, consistent with the Legislature's mandate that "local governments in the South Coast Air Basin must be delegated additional authority from the state in the control of vehicular sources and must retain existing authority to set stringent emission standards for non-vehicular sources." CHSC § 40402(g). The Legislature further provided that "[t]he south coast district board shall adopt revised and updated non-vehicular source emission limitations for inclusion in the state's implementation plan." CHSC § 40443. These particular authorities have not been granted by the California Legislature to any other air quality management district.²⁸ Vigilance by the District and the active promotion of emissions reduction strategies (such as the Rules) to complement the specific authority

²⁷ *See* CHSC §§ 40440-40459.

²⁸ *See* Cal. Leg. Info., <http://leginfo.legislature.ca.gov/faces/codesTOCSelected.xhtml> last visited Feb. 27, 2014.

granted to CARB are squarely within the scope of the District's powers and responsibilities under state law.

The District Court's April 2007 ruling in *AAR v. SCAQMD* included a finding that CHSC § 40702 prevented the District from promulgating in-use locomotive regulations. *See AAR v. SCAQMD* at *6. On appeal, the District demonstrated that this finding was in error, *inter alia*, for the reasons summarized above. The Ninth Circuit never reached this issue, and thus, obviously did not affirm the District Court's conclusion. *Association of American Railroads*, 622 F.3d at 1096 n. 1 (“[w]e assume without deciding that the Rules fall within the District's regulatory authority.”). Under these circumstances, neither the doctrine of *res judicata* nor principles of collateral estoppel preclude the District from contending – and CARB and EPA from concurring – that the District has adequate authority under state law to propose the Rules for inclusion in the California SIP. *Martin v. Henley*, 452 F. 2d 295, 300 (9th Cir. 1971); *Hicks v. Quaker Oats Co.*, 662 F. 2d 1158, 1168 (5th Cir. 1981). Indeed, the Railroads conceded this point in subsequent proceedings in the District Court: “[T]he District is correct that where an alternate ground is not decided on appeal it has no *res judicata* effect....”²⁹

²⁹ *See Ass'n of Am. R.R., BNSF Ry. Co. & Union Pac. R.R. Co.'s Reply to Opposition to Motion for an Order to Show Cause why S. Coast Air Quality Mgmt. Dist. & its Emps. Should not be Held in Civil Contempt or, in the Alt., an Order of Contempt (Doc. 232), Ass'n of Am. R.R. v. S.Coast Air Quality Mgmt. Dist., No. CV 06-1416 –JFW, (C.D. Cal. filed Dec. 22, 2011).*

For the same reasons, BNSF’s argument in this proceeding that the District Court’s ruling is “legally binding” and “the law of the case”³⁰ is simply wrong. The latter doctrine has no application in a separate, subsequent proceeding when the trial court ruling in question was presented to but never addressed (much less affirmed) by an appellate court. *United States v. Cote*, 51 F. 3d 178, 181 (9th Cir. 1995), *citing Lucky v. Miller*, 929 F. 2d 618, 621 (11th Cir. 1991). In this case, the Ninth Circuit did not explicitly or implicitly adopt the trial court’s finding on the state law issue; to the contrary, the Court of Appeals assumed that the trial court decided the issue incorrectly. The District Court’s finding has no binding or precedential effect in this proceeding. *See Fairbrook Leasing Inc. v. Mesaba Aviation, Inc.*, 519 F. 3d 421, 428 (8th Cir. 2008) (no implied affirmation of trial court reasoning).

Equally without merit is the argument advanced by UP that the injunction entered by the District Court in 2007 precludes EPA from including the Rules in the SIP, because the District supposedly “remains barred” from enforcing them. UP Reply at 15-16. Acknowledging (as it must) that the injunction did not bar the District from proposing to CARB that the Rules be submitted to EPA for inclusion in the SIP,³¹ UP

³⁰ BNSF Reply at 20, 22.

³¹ Subsequent to and consistent with the Ninth Circuit’s decision in *Association of American Railroads*, the District submitted its Rules to CARB. *See* 622 F. 3d at 1098. UP (and BNSF) protested that this action violated the District Court’s injunction, but that court ruled that the Railroads were judicially estopped from advancing such a claim by virtue of their own representations to the Court of Appeals. *See* Order Granting Defendants’ Motion to Vacate Order to Show Cause, (Doc. 232), *Ass’n of Am. R.R. v. S.Coast Air Quality Mgmt. Dist.*, No. CV 06-1416 –JFW, (C.D. Cal. filed Feb. 24, 2012) (EPA Petition Exh. B).

nevertheless claims that the injunction prevents their adoption and enforcement because it was based on the District Court's finding that the District lacked the requisite authority under state law. UP Reply at 15. This is incorrect as a matter of record.

The District Court's injunction was based squarely on the conclusion that the Rules were preempted by the ICCTA. *See AAR v. SCAQMD* at * 8 ("The Court concludes that the Rules are preempted in their entirety by the ICCTA as alleged in Plaintiffs' First Claim for Relief. Accordingly, the Court also concludes that Plaintiffs are entitled to a permanent injunction against enforcement of the Rules by Defendants."). At most, the District Court's discussion of state law amounts to an alternative ground of decision, which the Ninth Circuit actually presumed was incorrect.³² In upholding this ruling, the Ninth Circuit limited its holding to a finding that the ICCTA preempted the Rules because as of that time, they only had the "force and effect of state law," and thus did not qualify for the harmonization analysis applicable to federal enactments. *Association of American Railroads*, 622 F.3d at 1098. However, the Ninth Circuit also stated that "to the extent that state and local agencies promulgate EPA-approved statewide plans under federal environmental laws...ICCTA generally does not preempt those regulations because it is possible to harmonize ICCTA with those federally recognized regulations." *See id.* As components of the California SIP – and thus constituting federal law as well as District Rules – Rules 3501 and 3502 can be harmonized with the ICCTA. Once the Rules are approved into the SIP, the basis for the

³² As demonstrated herein, the Rules are authorized under state law.

District Court's injunction no longer will lie, and upon petition at the appropriate time, that court should vacate it. *See, e.g., Am. Petroleum Inst.*, 710 F. Supp. at 433. The District Court's injunction does not prevent EPA from adopting the Rules into the SIP.

As noted *supra*, the scope of the District's authority under California law to enforce the Rules as part of the SIP is not properly before the Board in this proceeding. To the extent that the Railroads' preemption position is based on the argument that the District lacks such authority, however, that argument is without merit.

B. The District's Proposed Rules Address Shortcomings In the 2005 CARB MOU

The Railroads³³ tout steps that they have taken in recent years to reduce locomotive emissions in Southern California – including in particular a 2005 Memorandum of Understanding (MOU) entered into with CARB – in an apparent effort to downplay the importance of Rules 3501 and 3502 to the achievement of the goals of the California SIP. As with the issue of the District's legal authority to propose and enforce the Rules as part of the SIP, the extent to which they would advance the cause of cleaner air in Southern California and comport with the policies of the CAA are not matters properly before the Board in this proceeding. Indeed, the District submits that CARB's recommendation of the Rules to EPA and the latter's inquiry regarding their harmonization with the ICCTA should be dispositive on those questions. The Board should take as established that the Rules are valid under California law and otherwise

³³ *See* AAR Reply at 1-2; BNSF Reply at 7-9; UP Reply at 11-12.

appropriate for inclusion in the SIP.³⁴ The realities of the Railroads' actions under the 2005 MOU, however, also confirm the need for additional action in the South Coast Region.

As explained in the Verified Statement of Moshen Nazemi filed with the District's February 14 Reply, the MOU's requirements that "non-essential" idling by locomotives not equipped with control devices be limited to 60 minutes, and the vague standard of "best efforts" to limit unnecessary idling, created loopholes that have allowed excessive and toxic PM and NOx emissions to persist. *See* District Reply, Nazemi V.S. at 6-9. To the same effect were complaints and testimony submitted by residents directly impacted by the idling of unattended locomotives, as presented in the Reply of the East Yard Communities for Environmental Justice to EPA's Petition. Further, before the District Court in November-December 2006 the Railroads' own witnesses testified that they made *no changes* in their operating practices in order to comply with the MOU's idling provisions.³⁵ The evidence does not support either the claim that the 2005 MOU produced sufficient reductions in idling-related emissions, or that it led to positive (for the environment) changes in railroad idling practices.

³⁴ *See* EPA Comments, at 1-2.

³⁵ *See* Reporter's Transcript on Appeal, *Ass'n of American Railroads v. South Coast Air Quality Management District*, No. CV 06-01416-JFW, 2007 WL 2439499 (C.D. Cal. Nov. 28-30, 2006) ("Trial Tr.") at 309-10 (BNSF witness Roberts) and 637 (UP Witness Brazytis) (Official Notice Tab, Exh. 4). BNSF's witness Stehly also acknowledged that the anti-idling devices called for by the MOU reduced BNSF's switch locomotive fuel costs by about 10%, making it likely that the carrier would have retrofitted the units even in the absence of any MOU requirement. *Id.* at 52, 77 (Official Notice Tab, Exh. 4).

Data assembled by CARB³⁶ likewise indicates that railroad assertions of dramatic progress on idling emissions under the 2005 MOU are overstated significantly. For example, CARB Railroad Inspection Summaries published from 2006-2010³⁷ provide data on idling by locomotive, by railyard. The data includes the date, the locomotive identifier, whether the unit was idling, and if it was issued a Notice of Violation (NOV) for idling in violation of the 2005 MOU. These inspection reports show that on average over the five-year time period studied, at a number of railyards in California there was a high rate of non-compliance with the 2005 MOU on a consistent basis. A total of ten (10) railyards had an average non-compliance rate for idling limits that exceeded 15%. Of these ten (10) railyards, six (6) are within the boundaries of the District.

³⁶ CARB supports the District on the questions of ICCTA preemption and the enforceability of Rules 3501 and 3502 as components of the California SIP. *See* CARB Reply at 2-3, 7-12.

³⁷ *See* Cal. Env't Prot. Agency, Air Res. Bd., *Railyard Inspection Summary*, (2006-2010), <http://www.arb.ca.gov/railyard/ryagreement/ryagreement.htm> (see reports listed under "Railyard Inspection Reports"). *See also* Cal. Env't Prot. Agency, Air Res. Bd., *Carb/Enforcement Program 2006-2010 Inspection Data*, (2010), http://www.arb.ca.gov/railyard/ryagreement/2006_2010_Inspection_data.pdf.

Railyards with Average Non-Compliance Rate > 15%¹						
Location	Non-Compliance Rate %					
	2006	2007	2008	2009	2010	Average
California Railyards Outside the District						
BNSF Richmond	27.1	50.0	35.6	18.3	0.0	26.2
UP Martinez	n/a	100.0	0.0	0.0	nd	33.3
UP Milpitas	0.0	75.0	n/a	0.0	0.0	18.8
UP Roseville	3.6	49.7	6.5	52.3	0.0	22.4
Railyards within SCAQMD Jurisdiction						
BNSF Commerce Eastern	25.0	100.0	27.7	0.0	11.8	32.9
BNSF LAXT ²	nd	nd	nd	nd	100.0	100.0
BNSF Pico Rivera	66.7	100.0	0.0	nd	nd	55.6
BNSF San Bernardino	5.6	100.0	5.6	0.0	0.0	22.2
BNSF Watson (Wilmington)	0.0	75.0	0.0	0.0	7.1	16.4
UP Colton	15.4	50.0	0.0	0.0	28.6	18.8

¹ Non-Compliance rate percentage = [Idling Violations (NOVs)/Idling Trains] x 100. Non-Compliance rate was calculated for each inspection and then averaged to provide annual rates. Most sites were inspected biannually, but there were a few instances where sites were inspected three times per year.

² Non-Compliance data for BNSF LAXT includes two separate inspections in 2010.

n/a = no trains were reported idling

nd = no data was reported

The foregoing table is conservative, because the non-compliance rate does not include warnings of non-compliance or “notices to comply,” which are recorded as part of CARB’s inspection reports but do not identify the type of violation. Only actual idling violations are included, which effectively under-represents the frequency with which idling emissions exceeded the 2005 MOU standards. The persistence of the Railroads’ failure to meet voluntary limitations is clear, however, and points up need for further action in California. The inspection report data also corroborates the testimony by residents that the 2005 MOU has not prompted a reduction in locomotive idling emissions sufficient to meet the Southern California clean air standards.

An in-depth report on “best practices” for railroads to improve energy efficiency released by the U.S. Department of Transportation earlier this year counted fuel savings from locomotive idling reductions among the principal strategies employed by major freight and passenger railroads.³⁸ Idling reduction measures are employed voluntarily by the Railroads to lower costs and increase margins, and include operational adjustments and equipment upgrades that parallel both Rule 3502’s idle limits and the “safe harbor” offered by the Rules for the installation of anti-idling devices. *See* DOT Report at 42, 50. Incentives for engineers to reduce idling (which BNSF reported as saving 5 gallons of fuel per hour) include gift cards. *Id.* at 50. Obviously, the Railroads can and do limit locomotive idling using various techniques, when they determine that it is their economic self-interest to do so. The contradiction between this rational behavior and their claims that the Rules will unreasonably burden interstate commerce is addressed *infra*. From the perspective of the need for the Rules as a matter of air quality policy, however, the record shows that they fill the gap between the Railroads’ economic self-interests and the public interest in healthy air.

³⁸ *See* USDOT & FRA, *Best Practices and Strategies for Improving Rail Energy Efficiency*, No. DOT/FRA/ORD-14/02 12, 21-22, 34, 41-42 (Jan. 2014), <http://ntl.bts.gov/lib/51000/51000/51097/DOT-VNTSC-FRA-13-02.pdf> (“DOT Report”).

III. The Proposed SIP Rules are Consistent With The CAA and The Locomotive Inspection Act

A. The Clean Air Act

In their Replies to EPA's Petition, the Railroads assert that EPA cannot incorporate Rules 3501 and 3502 into the California SIP because they allegedly are preempted by EPA's own authority to regulate locomotive emissions standards under Section 209(e) of the CAA (42 U.S.C. § 7543(e)).³⁹ As with so many other arguments that the Railroads have thrown up in response to the Petition, the issue raised is outside the scope of the Board's jurisdiction in this proceeding. Since EPA has asked only whether the SIP modification would offend the ICCTA and the Board's declaratory order authority is so limited, it should be assumed that there is no conflict between the Rules and the CAA. As with those other extra-jurisdictional claims, however, the Railroads' arguments also are without merit.

Section 213(a)(5) of the CAA (42 U.S.C. § 7547(a)(5)) vests EPA with authority to "promulgate regulations containing standards applicable to emissions from new locomotives and new engines used in locomotives." Pursuant to this authority, EPA established rules requiring the installation of idling control devices on locomotives that were newly manufactured or remanufactured subsequent to July, 2008. *See* AAR Reply at 24. Addressing the limits of its authority under CAA § 213, EPA also observed that except for its rule requiring anti-idling devices on new locomotives, "the Clean Air Act provisions do not appear to provide EPA with particular authority to prevent railroads

³⁹ *See* AAR Reply at 7, 22-23; BNSF Reply at 13-14; UP Reply at 6-8.

from allowing [locomotives] to idle.” *Id.* (citing EPA Idling Fact Sheet at 2). From this, the Railroads leap to the conclusion that since Congress did not give power to limit locomotive idling through regulation to EPA, it must be presumed to have intended that states and agencies such as the District could not exercise such authority either. *Id.* No authority is cited for this proposition, and the implication of the Railroads’ argument is that the issue has not yet been addressed by a court. This is incorrect.

EPA’s authority over locomotives is set forth specifically in Section 213(a)(5) of the CAA (42 U.S.C. § 7547(a)(5)), which charges EPA to “promulgate regulations concerning standards applicable to new locomotives and new engines used in locomotives.” Nothing in this statute gives EPA the authority to regulate the method of operation of locomotives, which is not a “standard,” as discussed *infra*. In contrast, states retain all power to regulate air pollution sources unless it is specifically removed by the CAA (or another statute). This is made clear by CAA Section 116 (42 U.S.C. § 7416), which provides that “except as otherwise provided in... [listed sections]...nothing in this chapter shall preclude or deny the right of any State or political subdivision thereof to adopt or enforce (1) any standard or limitation respecting emissions of air pollutants, or (2) any requirement respecting control or abatement of air pollution...”.

One of the listed provisions in Section 116, *supra*, is CAA § 209(e)(1), (42 U.S.C. § 7543(e)), which is the source of restrictions on state authority over locomotives under the Clean Air Act. It provides for the preemption of any attempt by a “State or any political subdivision thereof...to enforce any standard or other requirement related to the control of emissions from...new nonroad engines or nonroad vehicles,”

which include locomotives. In final rules adopted by EPA for the administration of CAA §§ 209(e) and 213, the agency concluded that the statute *does* allow state and local agencies to set limits on nonroad engine use or operation. On review, this conclusion was affirmed by the D.C. Circuit, which held that under established precedents, regulations limiting nonroad engine *use* were neither “standards” nor “other requirements” for purposes of Section 209(e). *Engine Mfrs. Ass’n.*, 88 F.3d at 1093-1094. *See also, Motor & Equip. Mfrs. Ass’n Inc. v. EPA*, 627 F. 2d 1095, 112-13 (D. C. Cir. 1979) (in-use regulations are not “standards” under the CAA). The court noted that valid local regulations might include “programs to control extended idling,” which are “expressly intended to control emissions.”⁴⁰ The AAR suggests that the portion of the D.C. Circuit’s opinion in *Engine Mfrs. Ass’n.* that addresses CAA §209(e) can be ignored as *dicta*,⁴¹ but that characterization cannot be squared with the plain text of the decision, which rejected the challenge to EPA’s determination that state and local governments can adopt in-use regulations. The Court of Appeals’ decision expressly relied on EPA’s approved construction of §209(e) to dispose of the petitions for review:

⁴⁰ *Engine Mfrs. Ass’n.* 88 F.3d at 1094. To the extent that the U.S. Supreme Court subsequently opined on the issue of “standards” under the preemption provisions of CAA § 209, it has limited them to requirements applicable to the “emission characteristics of a vehicle or engine. To meet them the vehicle or engine must not emit more than a certain amount of a given pollutant, must be equipped with a certain type of pollution-control device, or must have some other design feature related to the control of emissions.” *Engine Mfrs. Ass’n. v. S. Coast Air Quality Mgt. Dist.*, 541 U.S. 246, 253 (2004). The District Rules being considered by EPA do not require any design feature; they merely limit idling of unattended or delayed locomotives.

⁴¹ AAR Reply at 22, n. 15.

The preemptive language of § 209(e) is broad, but it does not speak directly to the question [of State in-use regulation] at hand. ... We therefore defer to the EPA's interpretation under *Chevron*. Accordingly, we grant the EMA petitions insofar as they challenge the limitation of the implied § 209(e)(2) preemption to new nonroad sources, and otherwise deny them.

Id. at 1094.

Under the CAA, emission regulations with respect to mobile sources are divided into two separate but complementary programs. For locomotives and other non-road sources, EPA sets “standards;” that is, rules regarding the emissions characteristics of the engine itself, mandatory pollution control devices, or design specifications. *See* 42 U.S.C. § 7547.⁴² States generally are preempted from setting such standards, but as shown above, they *are* permitted to establish regulations limiting idling. The fact that the CAA did not give EPA the authority to impose idling limits on existing engines does not mean that Congress stripped the states of their pre-existing authority to regulate idling. In the instant case, the District Rules proposed by CARB to EPA are an exercise of state and local agencies' reserved authority under the CAA, as construed by EPA and upheld by the courts.

⁴² Additionally, except for new locomotives, EPA may authorize California to adopt “standards” for motor vehicles or nonroad engines upon making specific findings. 42 U.S.C. §§ 7543(b), 7543(e)(2)(A). This is generally referred to as the “waiver” provision, because under these sections EPA “waives” its preemptive authority. The Railroads all note that no such waiver was sought by CARB or the District with respect to the Rules. AAR Reply at 22; UP Reply at 7; BNSF Reply at 13 n. 4. However, their observations are irrelevant, because no waiver is required for regulations related to use, such as idling limits, as they are not “standards” or “other requirements” under CAA § 209(e). *Engine Mfrs. Ass'n.*, 88 F.3d at 1093-1094.

B. The Locomotive Inspection Act

UP's Reply includes an argument that the Rules are preempted by the Locomotive Inspection Act ("LIA"),⁴³ yet another statutory assertion that is beyond the scope of this proceeding. UP Reply at 5-6. Purporting to interpret the Supreme Court's 2012 decision in *Kurns v. R.R. Friction Prods. Corp.*,⁴⁴ UP claims that LIA preemption now extends to any standard or agency action that "relates to the 'subject of locomotive equipment.'"⁴⁵ UP has misconstrued *Kurns*, which has no application to Rules 3501 and 3502.

More than twenty (20) years ago, the Ninth Circuit held that the LIA regulates "the 'design, the construction and the material' of every part of the locomotive, but does not mention the *use* of locomotive parts." *S. Pac. Transp. Co. v. Pub. Util. Comm.*, 9 F.3d 807, 811 (9th Cir. 1993) (emphasis in original). Accordingly, the court held that the LIA did not preempt an Oregon statute allowing the state Public Utilities Commission to regulate the use of train whistles (including air horns and other audible warning devices). *Id.*, 9 F.3d at 809 n. 3. Relying on the Supreme Court's 1926 decision in *Napier v. Atl. Coast Line R.R. Co.*,⁴⁶ the Ninth Circuit explained that "[b]ecause the Oregon law neither limits nor expands the type of equipment with which locomotives are

⁴³ 49 U.S.C. § 20701 *et seq.*

⁴⁴ *Kurns v. R.R. Friction Prods. Corp.*, 132 S. Ct. 1261 (2012). *See also* BNSF Reply at 18 (quoting and citing *Kurns*, 132 S. Ct. 1267-68).

⁴⁵ *See* UP Reply at 6.

⁴⁶ *Napier v. Atl. Coast Line R.R. Co.*, 272 U.S. 605, 611 (1926).

required to be equipped, it neither interferes with the goals of the [LIA] nor substantially interferes with its operation.” *S. Pac. Transp. Co.*, 9 F.3d at 811.

In *Kurns*, the Supreme Court reaffirmed and applied *Napier*, but did not even mention – much less overrule⁴⁷ – the distinction drawn clearly in *S. Pac. Transp. Co.* between state regulations respecting the “design, the construction, and the material” of locomotives, which the LIA preempts, and rules concerning the *use* of locomotives, which the Ninth Circuit held are outside its scope. The reason is readily apparent when the actual subject matter of *Kurns* is considered. At issue there were common law tort claims for defective locomotive designs, and a “failure to warn” of a dangerous condition, which also presupposes a defective design. *See* 132 S. Ct. at 1268. The claims related directly to the “design, the construction, and the material” of the locomotives,⁴⁸ and thus fell under the preemptive rubric of the LIA. *See id.* Rules 3501 and 3502, in contrast, relate solely to *use*; the LIA is not implicated.⁴⁹

A proper reading of *Kurns* also dispenses with the Railroads’ attack on their own straw man: the suggestion that the Rules actually compel the installation of anti-idling devices on their locomotives (which they then assert is preempted by various statutes).⁵⁰ In fact, the Rules do no such thing.

⁴⁷ The Supreme Court “does not normally overturn, or so dramatically limit earlier authority, *sub silentio*.” *Shalala v. Ill. Council on Long Term Care*, 529 U.S. 1, 18 (1996).

⁴⁸ *Napier*, 272 U.S. at 611.

⁴⁹ *S. Pac. Transp. Co.*, 9 F.3d at 811.

⁵⁰ *See, e.g.*, AAR Reply at 9; UP Reply at 2.

The Board is quite familiar with the very real and substantive distinction between a mandate to perform an act or alter equipment, on the one hand, and a “safe harbor” that offers immunity from application of an alternative use or performance standard, on the other. The Board’s own recent decision addressing BNSF’s (and UP’s) general tariff rules regarding control of fugitive coal dust is a case in point.⁵¹ EPA likewise has distinguished between requirements for anti-idling devices, which are preempted unless a waiver is obtained from EPA, and limitations on engine idling, such as requiring a shutdown of an engine after a defined time period, which are not preempted. For example, in acting recently on CARB’s truck rules, EPA stated: “EPA agrees with [CARB’s] analysis and *does not believe that in-use controls, such as idling limits, are preempted by Section 209(a).*”⁵² Idling limits for locomotives are no different, where they do not dictate how a manufacturer must design new engines.

In *Kurns*, the petitioners sought to argue that because their claim for “failure to warn” was not formally directed at the design of the locomotives *per se*, LIA preemption could be avoided. *See* 132 S. Ct. at 1267-68. However, the Court found that as a practical matter, the only way for the manufacturer to avoid liability was to change the design to remedy the “defect” that allegedly had required a warning. 132 S. Ct. at 1268 n. 4. In the instant case, compliance with the Rules can be achieved easily without

⁵¹ *Reasonableness of BNSF Ry. Co. Coal Dust Mitigation Tariff Provisions*, STB F.D. No. 35557 (STB served December 17, 2013).

⁵² Cal. State Motor Vehicle and Nonroad Engine Pollution Control Standards; Truck Idling Requirements, 77 Fed. Reg. 9,239, 9,245 (February 16, 2012) (Notice of Decision) (emphasis added).

making any changes to the locomotives' design: all that is required is a limitation on unattended *use*. More analogous here is the Supreme Court's disposition of *Ray v. Atlantic Richfield Co.*,⁵³ in which the Court made clear that where a state had in place a valid tug escort requirement – which did not affect ship design – it could offer the ship owner an option of using double-hulled ships and avoiding the escort rule without triggering the Ports & Waterways Safety Act's preemption of ship design requirements. The Court explained: “Given the validity of a general rule prescribing tug escorts for all tankers, [the State of] Washington is also privileged, insofar as the Supremacy Clause is concerned, to waive the rule for tankers having specified design characteristics.” 435 U.S. at 173.

Rule 3502 operates in the same way. Its basic requirement is a 30-minute idling limit applicable in certain circumstances, which is not preempted by the Clean Air Act. *Engine Mfrs. Ass'n.*, 88 F.3d at 1094. The Rule therefore may *exempt* from its idling limits a locomotive that meets specified requirements (*e.g.* having an anti-idling device). The fact that both provisions are intended to reduce air pollution does not change this result; in *Ray*, both provisions were intended to enhance safety and prevent marine pollution due to spills. *See* 435 U.S. at 169, 171.

Finally, in discussing preemption under the CAA, EPA has noted that because of the Class I railroads' market power over locomotive sales, manufacturers must

⁵³ *Ray v. Atl. Richfield Co.*, 435 U.S. 151 (1978).

be very responsive to changes in design requested by the carriers.⁵⁴ For that reason, EPA decided that state regulation would be preempted if it “would be expected to affect how a manufacturer designs a new locomotive or new locomotive engine....”⁵⁵ However, in this case the Rules could not have any effect on how a manufacturer designs its locomotives. By the time the Rules were proposed in 2006, all new line-haul locomotives already were being built with anti-idling devices. *See* District Reply, Nazemi V.S., Exh. 4 at 2. The Rules cannot be the motivation for the Railroads’ efforts to retrofit switch locomotives with anti-idling devices either, because the Railroads already agreed in the 2005 MOU to have more than 99% of their in-state (California) locomotives retrofitted by 2008. *Id.* It is clear from the record that the Railroads’ claims that the Rules force the installation of anti-idling devices (and therefore are preempted) have no basis in fact.

IV. The Proposed SIP Rules are Not Preempted by the ICCTA

As established in the District’s Reply and summarized earlier in these Supplemental Comments, the proper legal standard for evaluating Rules 3501 and 3502 as part of the California SIP is whether they can be enforced in harmony with the ICCTA, *not* whether as “local rules” impacting railroads, they should be preempted under 49

⁵⁴ Emission Standards for Locomotives and Locomotive Engines, 62 Fed. Reg. 6,366, 6,397 col. 1(Feb. 11, 1997).

⁵⁵ *Id.* *See also*, Emission Standards for Locomotives and Locomotive Engines, 63 Fed. Reg. 18,978, 18,994 (Apr. 16,1998).

U.S.C. § 10501.⁵⁶ The Railroads argue that inclusion of the Rules in the SIP should make no difference in terms of the legal analysis,⁵⁷ and they assert as guiding precedents previous Board decisions addressing state and local regulations affecting railroads from the perspective of standard preemption theory.⁵⁸ The Railroads are wrong.

The Ninth Circuit's decision in *Association of American Railroads* makes clear that once the Rules are considered as part of the SIP, they are *federal* enactments that qualify for a harmonization analysis, as distinguished from local regulations that are not entitled to such deference. *See* 622 F.3d at 1098. The distinction was acknowledged by the District Court as well; after finding (incorrectly) that only CARB could act on locomotive idling rules under the CAA, the court opined that “[a]s a result...the Court need not ‘harmonize’ or reconcile the preemptive effect of the ICCTA with the mandates of the CAA.” *AAR v. SCAQMD* at *6. The Board likewise has affirmed that state or local actions under the auspices of federal environmental laws carry a stronger presumption of consistency with the ICCTA, and that railroad efforts to avoid enforcement based on the ICCTA are subject to a stricter standard:

⁵⁶ *See* District Reply at 13-19; pp. 3-5, *supra*.

⁵⁷ *See* AAR Reply at 12, 18; UP Reply at 3, 14; BNSF Reply at 16.

⁵⁸ *See, e.g.*, BNSF Reply at 16-17, 23; AAR Reply at 14, n. 7.

[T]he Board has concluded that nothing in section 10501(b) is intended to interfere with the role of state and local agencies in implementing Federal environmental statutes such as the Clean Air Act, the Clean Water Act, and the Safe Drinking Water Act, unless the regulation is being applied in such a manner as to unduly restrict the railroad from conducting its operations or unreasonably burden interstate commerce.

Friends of the Aquifer, STB F.D. No. 33966 (STB served August 15, 2001) at 5-6. *See also, Cities of Auburn and Kent, WA – Petition for Declaratory Order – Burlington N. R.R. Co. – Stampede Pass Line*, 2 S.T.B. 330, 337 (1997) (“Rather than relegating state and local agencies to the periphery in implementing Federal law, the statutory scheme gives individual states the responsibility of developing and enforcing air quality programs...within their borders.”).

Rules 3501 and 3502 neither directly regulate rail operations, nor discriminate against railroads vis-à-vis other emitters of PM and NOx. As such, they can be enforced in harmony with the ICCTA as part of the California SIP. *See Grafton* at 6.⁵⁹

⁵⁹ *See also United States v. St. Mary’s Railway West, LLC*, 2013 WL 6798560*3 (S.D. Ga. 2013) (Section 10501(b) “displaces only those laws that have the effect of managing or governing rail transportation, while permitting the continued application of laws having a more remote or incidental effect on rail transportation.”) (Internal quotation marks omitted).

A. Rules 3501 and 3502 Do Not Directly Regulate Railroad Transportation

As the District established in its Reply, when the ICCTA must be accommodated with another federal statute, there is a strong presumption that both are to be given effect.⁶⁰ Application of that rule here requires that the Board limit its inquiry to whether Rules 3501 and 3502 intrude on matters “that are *directly regulated* by the Board (e.g., rail carrier rates, services, construction, and abandonment).” *See Grafton* at 4 (emphasis added). *See also*, District Reply at 13-19 (and authorities cited therein); *Cities of Auburn and Kent, WA*, 2 S.T.B. at 338-39. The Rules do not purport to control the Railroads’ rates or routing decisions, require pre-approval of new construction or abandonments, or direct the provision of transportation service itself. As part of the California SIP, the Rules’ principal focus and effect is enforcement of a core purpose of the CAA: reducing dangerous air emissions within a NAAQS non-attainment area. That this may have some impact on the Railroads’ locomotive idling preferences under certain circumstances “is in no way a direct regulation on [the Railroads’] activities.” *United States v. St. Mary’s Railway West, LLC*, at *4.⁶¹ As the courts have confirmed, if a rule implements a core provision of one federal statute while only marginally impacting another, full effect must be given to the core purpose of the first statute. *N.Y.*

⁶⁰ *See, e.g., Nat’l. Ass’n. of Home Builders*, 551 U.S. at 662; *Massachusetts v. EPA*, 549 U.S. 497, 532 (2007).

⁶¹ *See also, Engine Mfrs. Ass’n*, 88 F.3d at 1094 (in-use regulation of vehicle idling by states was not precluded by the statutory delegation of authority to set emissions standards and requirements to EPA).

Susquehanna & W. Ry. Corp. v. Jackson, 500 F.3d 238, 252 (3rd Cir. 2007). *See also*, *Tyrell v. Norfolk S. Ry. Co.*, 248 F.3d 517, 522-23 (6th Cir. 2001).

Ignoring the Ninth Circuit’s clarification of the applicable law regarding the Rules, the Railroads argue that portions of a report issued by CARB in 2005 should be probative on the question whether the Rules as proposed for inclusion in the SIP in 2014 should be found preempted. *See* UP Reply at 12, 19-20. There is no merit to this position. In 2005, CARB was addressing a proposed rule *different* from those proposed by EPA for inclusion in the SIP in 2014, so even in the absence of intervening authority, the Railroads’ reference misses the mark.⁶² However, the clearest rebuttal to the Railroads’ point is CARB’s own Reply to the EPA Petition in this proceeding, which fully supports the District and – relying on *Association of American Railroads*⁶³ – argues that the Rules should be harmonized with the ICCTA and upheld:

⁶² The report, a copy of which appears as Exhibit 15 to BNSF’s Reply, addressed the question whether CARB could or should attempt to promulgate the provisions of the 2005 MOU in the form of binding regulations. *Inter alia*, those provisions included mandates for the installation of idling control devices, and mandatory health risk assessments at railroad yards that could trigger specific mitigation measures (BNSF Reply Exh. 15 at 1-2), neither of which are elements of Rule 3501 or Rule 3502.

⁶³ CARB Reply at 9 (citing *Association of American Railroads*, 622 F.3d at 1098 (“Now that South Coast has followed the Court’s directions and submitted its plans for approval, the matter should be settled against preemption.”)).

Neither the STB nor any federal court has ever held a federal environmental action to be preempted by the ICCTA. Instead, the STB has made clear that the railroads continue to be responsible for compliance with environmental laws, including regulatory measures required for state implementation plans under the Clean Air Act. This interpretation harmonizes the mandates of the two federal statutes, ensuring that states and local jurisdictions can protect the health of their citizens while the STB continues its important work. The STB should maintain this long-standing approach in this matter. South Coast's two locomotive idling rules were developed to meet its Clean Air Act obligations and, if approved by EPA, will become federal law. As such, they fall squarely within the STB's long-standing precedent, and would not be preempted if approved.

CARB Reply at 1-2.

The Railroads' position in this proceeding appears to be that any rule that has a perceived impact on their operational preferences should be preempted, even if that rule implements federal law and mirrors actions that the Railroads themselves will take *voluntarily* when their own interests are served. The law is otherwise, especially when the federal law in question is the CAA or other environmental statute. *Association of American Railroads*, 622 F.3d at 1098; *Bos. & Me. Corp.*, 5 S.T.B. at 508. The Rules at issue here are "attenuated and peripheral" to the direct regulatory purposes of the ICCTA,⁶⁴ while they serve core goals of the CAA. Therefore, they cannot be deemed preempted. *See New England Transrail, LLC – Constr., Acquisition and Operation Exemption – In Wilmington and Woburn, MA*, 2007 STB Lexis 391, at *19 (June 29,

⁶⁴ *Merrill Lynch v. Ware*, 414 U.S. 117, 131-36 (1973).

2007) (“[w]here there are overlapping Federal Statutes, they are to be harmonized, with each statute given effect to the extent possible”).

B. Rules 3501 and 3502 Do Not Unreasonably Interfere With Interstate Commerce or Unreasonably Burden Railroad Operations

As the District’s witnesses Nakamura and Reistrup established previously, compliance with the reporting requirements in Rule 3501 will have only a minimal impact on railroad crew procedures, and imposes no burden whatsoever on interstate commerce.⁶⁵ The limited information required to be reported⁶⁶ already is collected and stored automatically by on-board locomotive event recorders, and the Rule allows considerable flexibility in terms of who actually records and reports the information, and when the task must be performed.⁶⁷ As noted by Witness Reistrup, the reporting process described in Rule 3501 is less rigorous than both the Railroads’ own internal recordkeeping, and the requirements imposed by FRA regulations. District Reply, Reistrup V.S., p. 3, 7-8.

District witnesses Thomas E. Johnson, P.E. and Richard C. Beall, whose joint Verified Statement is submitted with these Supplemental Comments, together have more than 70 years of experience with the design and operation of railroad locomotives,

⁶⁵ See District Reply, Nakamura V.S., p. 8-11, Reistrup V.S., p. 5-8.

⁶⁶ The reporting Rule was developed with input from the Railroads, and the scope of the information to be required was pared down during the development process, specifically in response to concerns expressed by the Railroads’ representatives. District Reply, Nakamura V.S., p. 10.

⁶⁷ *Id.*, p. 11-12.

including Automatic Engine Start/Stop (“AESS”) equipment which is now in service on more than 95% of the locomotives used in the South Coast Air Basin.⁶⁸ Expanding upon Mr. Reistrup’s prior testimony, Messrs. Johnson and Beall explain in detail the steps that the Railroads’ crews would take to comply with Rule 3502, under a variety of locomotive configuration scenarios. Confirming Mr. Reistrup’s earlier opinion,⁶⁹ they also demonstrate how compliance would not be unduly burdensome either to the Railroads’ operations or interstate commerce.

In a nutshell, Messrs. Johnson and Beall show that with reasonable crew management practices, a train which is held unattended under circumstances where Rule 3502 would apply should be ready for subsequent movement after compliance with the Rule at the same time as it would have been had it been left idling. Johnson/Beall V.S., p.5-8. For the vast majority of locomotives that are AESS-equipped, the stop/start sequences involved in compliance would take only minutes to execute,⁷⁰ and for the units that are not so equipped, time needed for the necessary steps should be built into the crew’s pre-departure orders.⁷¹ For the relatively few trains in a distributed power configuration that might be held unattended in a yard for more than 30 minutes,⁷² Messrs.

⁶⁸ Johnson/Beall V.S., p. 7.

⁶⁹ District Reply, Reistrup V.S., p. 8-12.

⁷⁰ Johnson/Beall V.S., p. 9-13.

⁷¹ *Id.*, p. 4-6.

⁷² *Id.*, p. 15.

Johnson and Beall explain how hostlers and other available yard personnel would prevent or drastically minimize any delays.⁷³ Indeed, the experts show that if a train subject to Rule 3502 is delayed in departing a yard or reaching its next scheduled station, the cause most likely would be whatever prompted the carrier to hold the train unattended in the first place, not the carriers' compliance with Rule 3502.⁷⁴ Like its reporting counterpart, Rule 3502 does not impose an undue burden on railroad operations, and compliance with its limited restrictions will not interfere with interstate commerce.

The Railroads⁷⁵ reference a September 27, 2013 letter signed by FRA Administrator Joseph Szabo and addressed to EPA as supposed evidence of FRA "safety concerns" over Rule 3502, which the Railroads imply were raised *sua sponte* by FRA and claim are entitled to "substantial weight" in this proceeding.⁷⁶ However, a review of the letter makes clear that FRA essentially was passing on points raised by AAR, after that organization had "reached out" to FRA and provided various unidentified materials. It is not an objective assessment made after careful agency consideration of the views of all interested parties. It also reflects an incomplete understanding of how the Rules operate, and the manner in which they were developed. This information subsequently was provided by the District to EPA, in a letter dated November 14, 2013 and accompanying

⁷³ *Id.*, p. 16.

⁷⁴ *Id.*, p. 20-21.

⁷⁵ AAR Reply at 27; UP Reply at 10; BNSF Reply at 14. A copy of the letter appears as Exhibit 14 to BNSF's Reply.

⁷⁶ AAR Reply at 27.

Report by Mr. Colon Fulk, an expert with more than 33 years' experience in locomotive operations.⁷⁷

Mr. Fulk explained that contrary to the AAR "concern" advanced by FRA, any differences between the way EPA regulations define "unattended equipment" and the definition of "unattended" used in Rule 3502 would not cause confusion. The latter had been discussed with the Railroads during the development of Rule 3502, and previously was clarified by District staff.⁷⁸ Mr. Fulk further explained that the engine shutdown required by the Rule would have no effect on the train's subsequent operation unless the shutdown exceeded four (4) hours, in which case an air brake test would be required. The District pointed out that the Railroads have never presented evidence of occasions where a locomotive legitimately would be off-air for more than four (4) hours.⁷⁹ Mr. Fulk also explained that restarting a locomotive's engine consumes only a few minutes' time, and he described how the Railroads' own procedures and experience mitigated any risk associate with the manual setting and resetting of train brakes. To the extent that there is any risk at all in this regard, it is due to the train being left unattended, not to its engine being shut down.

That measures to curtail idling of unattended locomotives as required by Rule 3502 do not pose an unreasonable burden on railroad operations is further

⁷⁷ These responsive materials were included in the attachments to EPA's Petition, and for convenience are reproduced in Official Notice Tab, Exhs. 5 & 6.

⁷⁸ See District Reply, Nakamura V.S. at 19.

⁷⁹ It is noteworthy that even in such an event, the engine could be restarted in order to recharge the brakes, and the idling limit no longer would apply.

confirmed by the recent DOT Report referenced *supra*, the Railroads' own internal procedures, and their voluntary compliance with the 2005 CARB MOU. The ease of compliance with the reporting requirements of Rule 3501, in turn, was established through testimony submitted on the Railroads' behalf before the District Court in 2006.

The 2014 DOT Report contains numerous, approving references to measures undertaken voluntarily by U.S. freight railroads (including BNSF, UP and NS) to increase fuel efficiency by reducing the incidence and duration of locomotive idling. These include the installation of start-stop and idle control devices;⁸⁰ special training for engineers;⁸¹ and adjustments to operating practices.⁸² AAR also listed these actions in its own white paper as examples of “the most effective strategies” to improve railroad fuel efficiency.⁸³ It is reasonable to assume that the Railroads would not implement these strategies – which are mirrored by Rule 3502's idle limits and safe harbor – if the expected benefits in fuel cost savings did not outweigh (most likely substantially) any potential inconvenience to railroad operations. The Railroads' “sky is falling” claims regarding the alleged effects of Rule 3502 on those operations are belied by their own internal practices.⁸⁴

⁸⁰ DOT Report at 12, 23, 34, 42, 62.

⁸¹ *Id.* at 12, 34, 50.

⁸² *Id.* at 23, 50.

⁸³ *Id.* at 34.

⁸⁴ *See* District Reply, *Reistrup V.S.* at 3-4, 8-11.

Likewise, the Railroads' complaints that the safe harbor offered by the Rules if anti-idling devices are in place and set to shut down engines after 15 minutes is unduly burdensome,⁸⁵ is contradicted by their own voluntary undertakings with CARB. Before the Rules initially were adopted by the District, the Railroads had agreed with CARB in the 2005 MOU to set all automatic idling devices that already were, or in the future would be, installed in locomotives servicing California to a 15-minute limit.⁸⁶ Thus, while the Railroads now complain that the Rules' safe harbor for locomotives with idling devices set at 15 minutes conflicts with EPA's rule that devices on new or remanufactured units must be set at 30 minutes, they already had agreed to the 15 minute limit before either the EPA rule or Rules 3501 and 3502 were adopted. Established Board precedent makes clear that the Railroads' agreement to comply with that standard is an admission that it would not interfere with interstate commerce or unduly burden railroad operations. *See Twp. of Woodbridge, N.J. v. Consolidated Rail Corp., Inc.*, 5 S.T.B. 336, 340 (2000).

Finally, in 2006 BNSF and UP's own witnesses before the District Court acknowledged that the information gathering and reporting requirements of Rule 3501 impose no real burdens on their operations. UP's witness Joel Ritter testified that all information required to be gathered regarding idling events either already was recorded

⁸⁵ *See* AAR Reply at 8-9; BNSF Reply at 10-11, 14; UP Reply at 13.

⁸⁶ District Reply, Nazemi V.S., Exh. 4, Sec. C(1)(b). *See also* Trial Tr. at 78, 79 (Official Notice Tab, Exh. 4), where BNSF's trial witness Stehly confirmed that under MOU locomotives were to be installed with anti-idling devices set at 15 minutes.

or could be downloaded from locomotive event recorders.⁸⁷ He further testified that as of 2006, about 90% of UP's locomotives were equipped with recorders, a fact confirmed in this proceeding by the District's witness Reistrup.⁸⁸ UP's witness Douglas Wills further acknowledged that existing crew forms easily could be revised to report the information required by Rule 3501.⁸⁹ He also made that admission in 2006; since that time, the Railroads have had ample opportunity to implement those uncomplicated revisions.

C. Inclusion of the Rules In The SIP Will Not Lead to a "Patchwork" of Local Regulations

The Railroads contend that if Rules 3501 and 3502 are part of the California SIP, it will "open the floodgates" of local regulations, and start the Railroads down a "slippery slope" that could result in a "balkanization of the national rail network."⁹⁰ They argue that "there will be no end to the variety of requirements" and that these localized regulations will "impose undue burdens on the railroads."⁹¹ *See* UP Reply at 4; *see generally* BNSF Reply at 2-4. These claims are completely overblown.

In analogous circumstances, the Supreme Court has rejected Commerce Clause challenges based on naked claims regarding the possibility of differing state requirements: "While appellant argues that other local governments might impose

⁸⁷ Trial Tr. at 601 (Official Notice Tab, Exh. 4).

⁸⁸ *See id.*; District Reply, Reistrup V.S., p. 5-6.

⁸⁹ Trial Tr. at 362 (Official Notice Tab, Exh. 4).

⁹⁰ BNSF Reply at 18; NS Reply at 5-8; UP Reply at 4. *See also*, AAR Reply at 16.

⁹¹ UP Reply at 4; BNSF Reply at 2.

differing requirements as to air pollution, it has pointed to none.... We conclude that no impermissible burden on commerce has been shown.” *Huron Portland Cement Co. v. City of Detroit*, 362 U.S. 440, 448 (1960). *See also, Pacific Merchant Shipping Ass’n v. Goldstene*, 639 F.3d 1154, 1181 (9th Cir. 2011). Courts have applied the same principle in statutory preemption analyses. Speculation about possible future rules does not constitute proof of interference required for a finding of preemption. *Fuller v. Norton*, 86 F.3d 1016, 1026-27 (10th Cir. 1996) (“We are unwilling to preempt...based on speculation....”).

For any proposed rules to be included within a state’s SIP, they first must survive the rulemaking and approval process at the state level, and then be reviewed and accepted by EPA. State procedures (such as those followed by CARB and by the District under CHSC §§ 40725-40728, 40440.5 and 40440.7) afford interested parties ample public notice, opportunity to comment, and – as the Railroads did with Rules 3501 and 3502 – shape the regulations in response to their concerns. While other states obviously are not subject to the CHSC, most have comparable regimes, and at a minimum, EPA’s regulations impose notice-and-comment requirements for any state’s SIP submittal. 40 C.F.R. Part 51.102. EPA then must evaluate and propose action on SIP submittals, in a process that affords additional opportunity for public input (as occurred in the case of Rules 3501 and 3502). If the rules at issue impact railroads in some fashion, in harmonizing any future SIP rule EPA also will weigh the benefits with any potential burden on those railroads, including whether it imposes disparate or conflicting requirements. Thus, for example, an idling limit such as Rule 3502, which is essential to

promoting cleaner air in the NAAQS non-compliant and congested South Coast Air Basin, may not be found to outweigh any associated effects in another region that is not afflicted with those conditions.

Even if other states were to follow the lead of California and propose the adoption of locomotive idling limits as part of their SIPs, it is likely that those rules will be similar, not “patchwork” or “balkanized”. For example, Massachusetts has intervened in this proceeding to protect its interest in enforcing the idling limits in its own approved SIP. *See* 310 CMR 7.11(1). The Massachusetts rule is similar to Rule 3502, as it limits idling to 30 minutes in specified circumstances. Any other state considering such a rule would have a strong incentive to adopt the same standard as the District has promulgated, so as to ensure that the state’s new rules also would be accepted by EPA.

Finally, assuming *arguendo* that EPA ultimately did approve different state idling limits, they still would not “impose severe operating burdens” because the Railroads already have systems in place to comply with local rules and regulations.⁹² Currently, the Railroads contend regularly with local rules governing speed limits, time in front of gates, horn blowing, and idling.⁹³ In order to provide crews with the information necessary to comply with local requirements for a given area, the Railroads publish

⁹² *See* Trial Tr. at 692-94 (testimony of Colon Fulk) (Official Notice Tab, Exh. 4); *see generally id.* at 234. As the D.C. Circuit has noted, regulations that apply to the use of equipment, as opposed to its design, “are inherently local in character, in that their appropriateness depends on local conditions.” *Engine Mfrs. Ass’n.*, 88 F. 3d at 1094, n. 8.

⁹³ Trial Tr. at 692-94 (Fulk) (Official Notice Tab, Exh. 4); *id.* at 105-06 (Stehly).

timetables that serve as reference guides for specific regions, which every conductor is required to carry while on duty.⁹⁴ The Railroads can and regularly do comply with these location-specific requirements.⁹⁵ There is no reason to expect that the task of complying with Rules 3501 and 3502 will be any different or impose any more of a burden on the Railroads.⁹⁶ And as recognized by the Ninth Circuit, use regulations do not pose the risk that railroads may have to “remove or add equipment as they travel from state to state.” *S. Pac. Transp. Co.*, 9 F.3d at 811.

**D. The Rules Are Not Discriminatory
Against the Railroads**

A fair consideration of the record confirms that as *emissions regulations* under the California SIP, Rules 3501 and 3502 would not be discriminatory against railroads.⁹⁷ The fact that these particular provisions apply only to an activity (the idling of locomotives) conducted by railroads properly cannot be the determining factor,⁹⁸

⁹⁴ *See id.* at 693.

⁹⁵ *See id.* at 692-94.

⁹⁶ It bears repeating that the Railroads already are motivated to reduce idling to save on fuel costs, so adhering to the Rules actually will provide an economic benefit. *See* Trial Tr. at 322 (Douglas Wills of UP agrees with statement that UP “wants to conserve fuel by curbing idling.”) (Official Notice Tab, Exh. 4); *see also id.* at 56 (BNSF document states that “60 percent of idling time was avoidable.”).

⁹⁷ *See Grafton* at 6.

⁹⁸ In *dicta*, the Ninth Circuit suggested that under the standard preemption test applicable to state and local regulations, the fact that a proposed rule only applied to railroads could support a finding that it was not a rule of “general applicability” and thus would not pass muster. *Association of American Railroads*, 622 F.3d at 1098. However, the court already had concluded that the decision below would be affirmed on other grounds, and it

because they do not exist in isolation. Rather, they constitute *parts* of a broader California regime presided over by an agency charged with controlling air pollution, not regulating transportation.

As the District demonstrated in its Reply, at the time that the Rules were proposed for inclusion in the SIP, regulations already had been promulgated at the state level to control or limit emissions of PM and NO_x by virtually any industry operating in California whose processes contribute to the state's failure to achieve the NAAQS for these contaminants, including industrial, institutional and commercial boilers, steam generators and process heaters. *See* District Reply, *Nazemi V.S.*, p. 3. These regulations impose recordkeeping and emissions limitation requirements that are more onerous and burdensome than Rules 3501 and 3502, both in terms of frequency of reporting and in the actions mandated to achieve compliance. *Id.* at 3-4; *see also* *Nakamura V.S.*, p. 8-10.⁹⁹ Moreover, Rules 3501 and 3502 only apply when emitting locomotives are functioning as stationary emissions sources; they have no impact whatsoever on in-motion locomotives, whether or not they actually are engaged in transportation. *Id.*, *Nakamura V.S.*, p. 14. The Rules are part of a regime of general application to industries of various types across California, which has as its central purpose the control of emissions of PM and NO_x.

was addressing the Rules specifically as *state* enactments that did not qualify for a harmonization analysis. Its observation has no application to the question whether the Rules can be accommodated to the ICCTA as parts of *federal* law, that “typically are not preempted” and are to be regarded as equally effective vis-à-vis the ICCTA. *Id.*; *Radzanower v. Touche Ross & Co.*, 426 U.S. 148, 155 (1976).

⁹⁹ *Inter alia*, some of these regulations mandate the installation of specific pollution control technology. District Reply, *Nakamura V.S.* at 9-10.

While railroads are included in this regime, they are not singled out for discriminatory treatment or subjected to arbitrary enforcement intended to restrict an activity in which other industries are free to engage. *Compare, Bos. & Me. Corp.*, 5 S.T.B. at 509. Indeed, California already has subjected the Railroads' chief intermodal competitor (motor carriers) to more stringent idling limits. *See* District Reply, *Wallerstein V.S.*, p. 6-8.

Rules 3501 and 3502 effectuate core purposes of the CAA within California,¹⁰⁰ while only grazing the periphery of the ICCTA. *United States v. St. Mary's Ry. W., LLC*, at *4. They can and should be enforced in harmony with the latter statute.

E. The Rules are Limited in Scope

Rules 3501 and 3502 were developed following a procedure in which the Railroads were active participants, and in which their views and concerns translated directly into modifications to reduce the burden of compliance.¹⁰¹ Contrary to the Railroads' hyperbolic warnings of a "grave risk to the rail industry"¹⁰² and "harm [to] the Nation's prosperity,"¹⁰³ the end result was Rules which represent the least drastic (from the standpoint of impact on railroad operations) means to achieve emissions reductions mandated by the CAA.

¹⁰⁰ *See* District Reply at 31-40.

¹⁰¹ *See* District Reply, *Nakamura V.S.* at 3-7.

¹⁰² AAR Reply at 16.

¹⁰³ *Id.* at 26.

Rule 3501 requires no communication between dispatchers or yardmasters and crews that do not already take place in the ordinary course,¹⁰⁴ and as the District has established through its witness Reistrup,¹⁰⁵ the five (5) pieces of information required to be reported are readily available from on-board equipment on virtually all locomotives in the Railroads' fleets. Neither the time at which the information is to be recorded nor who must record it is specified,¹⁰⁶ so the Railroads have complete flexibility to comply in the manner that best fits their individual operational and safety practices.

The AAR, UP and BNSF all claim that Rule 3501 is “burdensome,”¹⁰⁷ but they offer no detailed explanations as to why. Instead, there are vague allusions to some sort of manual reporting procedure, as if crews would be required to stop work, produce pencil and pad, and make extensive notes of information that cannot easily be obtained. *See* BNSF Reply at 11 (“the rules would meaningfully decrease yard crew time per day simply due to the requirements to record locomotive ‘idling events’.”). The reality is otherwise: the locomotives themselves perform the information recording function,¹⁰⁸ and actual reporting can be performed with minimal crew effort and at almost any time that is convenient.¹⁰⁹

¹⁰⁴ District Reply, Nakamura V.S. at p. 10.

¹⁰⁵ District Reply, Reistrup V.S. at 3, 5-7.

¹⁰⁶ District Reply, Nakamura V.S. at 8-9.

¹⁰⁷ AAR Reply at 16; UP Reply at 19; BNSF Reply at 11.

¹⁰⁸ *See supra* note 105.

¹⁰⁹ District Reply, Nakamura V.S. at 9.

The scope of Rule 3502 likewise is limited. Rule 3502 (d)(1) mandates shut-down of a locomotive's *engine only*, if the unit is unattended for more than 30 minutes for one of five (5) specific reasons. Trailing locomotive engines in a consist need only be shut down (the lead engine can continue to idle) in two (2) scenarios, both of which require that the operator specifically be informed that the consist will not move for at least 30 minutes (Rule 3502 (d)(2)). Battery power can remain engaged, thereby maintaining climate controls, on-board communications, radio contact with unmanned units, etc. And as noted *supra*, in the limited number of instances where distributed power configurations may be involved, available yard personnel can assist train crews.¹¹⁰ Moreover, exceptions from even these limited engine shut-down requirements are provided in the event that ambient temperatures are lower than 40 degrees; engine idling is needed to recharge batteries; or an emergency condition arise (Rule 3502 (j)).

As with Rule 3501, the Railroads' alarms over the impact of the engine idling limitations on system operations bear no rational relationship to the selective and limited scope of the actual Rule. For example, allegations of excessive time dedicated to shutting down and restarting engines¹¹¹ are belied by District staff's direct observations of railroad operations and the carriers' own internal procedures.¹¹² Similarly, claims regarding the supposed impact of Rule 3502 on trains utilizing distributed power

¹¹⁰ See Johnson/Beall V.S., p. 16.

¹¹¹ See, e.g., BNSF Reply at 11.

¹¹² District Reply, Nakamura V.S. at 20-21.

configurations¹¹³ ignore the facts that these configurations rarely would be held in yards, and could be assisted by yard personnel should it be necessary. Engine shut-down also leaves battery power available to support radio control of the remote units,¹¹⁴ and is only required when the *entire train* is unattended for more than 30 minutes. *See* District Reply, *Nakamura V.S.*, p. 19. The Railroads' objections are long on rhetoric, but short on relevant facts that actually apply to the limited requirements of Rule 3502.

Before the Rules ever were proposed to CARB for recommendation to EPA as additions to the California SIP, they were considered and debated extensively in proceedings that included the active and substantive participation of the Railroads. As a result of that collaboration, the final Rules developed by the District reflect numerous modifications to earlier proposals that were adopted specifically in response to concerns expressed by BNSF, UP and the AAR.¹¹⁵ Rules 3501 and 3502 as currently before the Board at the request of EPA represent a minimalist approach to addressing persistent contributions by locomotives to violations of federal ambient air quality standards and emissions of carcinogenic diesel particulates.

¹¹³ UP Reply at 23.

¹¹⁴ *See* *Johnson/Beall V.S.* at ____.

¹¹⁵ District Reply, *Nakamura V.S.* at 3-7.

REQUEST FOR OFFICIAL NOTICE

As part of this Reply, the District respectfully requests that the Board take Official Notice of the following accompanying items:

1. Press Release, DOJ, Mass. Bay Transp. Auth. To Spend Millions to Reduce Commuter Train Emissions in Clean Air Act Settlement (Aug. 4, 2010), obtained from <http://www.justice.gov/opa/pr/2010/August/10-enrd-896.html>.
2. U.S. EPA, *Clean Air Act Settlement with the Mass. Bay Transp. Auth. (MBTA) & Mass. Bay Commuter R.R. Co. (MBCR) for Commuter Train Idling Violations*, U.S. EPA Fact Sheet 3 (Aug. 4, 2010), obtained from <http://www.epa.gov/region1/enforcement/air/pdfs/CAA-MBTA-MBCR-Fact-Sheet.pdf>
3. Memorandum of Understanding on Environmental Justice and Executive Order 12898 (was signed Aug. 4, 2011), obtained from <http://epa.gov/environmentaljustice/resources/publications/interagency/ej-mou-2011-08.pdf>
4. Reporter's Transcript on Appeal, *Ass'n of American Railroads v. South Coast Air Quality Management District*, No. CV 06-01416-JFW, 2007 WL 2439499 (C.D. Cal. Nov. 28-30, 2006).

Trial Day 1: Testimony of Mark P. Stehly and Chris Allen Roberts.

Trial Day 2: Testimony of Chris Allen Roberts and Douglas Wills.

Trial Day 3: Testimony of Joel Benton Ritter, Michael Brazytis,

and Colon Fulk.

5. Letter from Colon Fulk to Barbara Baird, District Counsel SCAQMD (Nov. 13, 2013) *reprinted in U.S. EPA- Petition for Declaratory Order*, FD 35803, at 481-86 (STB served Mar. 25, 2014) (two copies of the three-page letter were submitted with the petition).
6. Letter from SCAQMD to U.S. EPA (Nov. 14, 2013) *reprinted in U.S. EPA- Petition for Declaratory Order*, FD 35803, at 487-500 (STB served Mar. 25, 2014).

The Board may take official notice in declaratory order proceedings. *See Bos. v. Me. Corp. and Springfield Terminal R.R. Co. – Petition for Declaratory Order*, F.D. No. 35749 (October 31, 2013) 2013 STB LEXIS 333, *6. The above matters are proper subjects for official notice. Notice may be taken of a U.S. Government publication posted on the department’s official website. *In re Wellbutrin ST/Zyban Antitrust Litig.*, 281 F. Supp. 2d 751, 755 (E.D. Pa. 2003). Similarly, records of a state government are subject to official notice. *L’Garde, Inc. v. Raytheon Space & Airborne Sys.*, 805 F. Supp. 2d 932, 937-38 (C.D. Cal. 2011). Notice also may be taken of transcribed federal court testimony, which already has been submitted in this proceeding by other parties, without objection.

CONCLUSION

For the reasons set forth herein, in the accompanying Verified Statements and Exhibits, and in the District's February 14, 2014 Reply, the Railroads' objections to the proposed Rules should be overruled, EPA's Petition should be granted, and the Board should affirm that District Rules 3501 and 3502 are enforceable as part of the California SIP under the CAA, and are not preempted by the ICCTA.

Respectfully submitted,

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Filed: March 28, 2014

Attorneys and Practitioners

CERTIFICATE OF SERVICE

I hereby certify that on this 28th day of March, 2014, I served copies of the forgoing Supplemental Comments of the South Coast Air Quality Management District on all known parties of record to this proceeding by first class U.S. Mail, postage prepaid.

Kelvin J. Dowd

VERIFIED STATEMENT OF
THOMAS E. JOHNSON, P. E. & RICHARD C. BEALL

We are Thomas E. Johnson and Richard C. Beall. Together we have over 70 years of locomotive-related experience in a variety of disciplines. Our relevant experience is set out in more detail below. The South Coast Air Quality Management District (“South Coast”) has asked us to address the impact of its Rule 3502 on locomotive operations, and specifically the steps that locomotive engineers, conductors and yard personnel would take to comply with Rule 3502. As explained below, there are no extraordinary or disruptive measures that locomotive engineers would need to take to comply with the Rule.

I. Qualifications

Thomas E. Johnson, P. E. is President of Railroad & Metallurgical Engineering, Inc., a consulting firm specializing in railroad operations and accident analysis and matters related to engineering/failure analysis, new product development, and product liability.

Mr. Johnson has a Bachelor of Science degree in Metallurgical Engineering from the University of Minnesota. He is a licensed Professional Engineer (P. E.).

From 1981 through 1994, Mr. Johnson was employed by GE Transportation Systems in Erie, Pennsylvania, a division of the General Electric Corporation that manufactures and sells locomotives to the railroad industry. His positions at GE included Senior Metallurgist, Technical Leader-Component Design, Manager-Product Engineering, and Manager-Component Design and Product Engineering reporting to the Manager, Diesel Engine Operation.

While at GE, he worked in the Locomotive Engineering Department. Mr. Johnson wrote Equipment and Material Specifications, introduced new product components, and performed failure analysis on component failures. He studied event recorder downloads, fault logs, and

data packs in working with the railroads to improve performance and reduce failures. He managed various GE design engineering programs that included the design and field testing of locomotives with the Class I railroads. He worked with all of the Class I railroads on locomotive projects and development over his years with GE. Since he began his engineering consulting practice, he has performed engineering consulting services for the Class I railroads and some short line railroads. Much of his work at GE led to the current AESS (Automatic Engine Start/Stop) equipment and strategies that are becoming standard with all the Class I railroads.

Mr. Johnson has taught engineering classes at Gannon University in Erie, PA, and he has been part of the adjunct faculty at the University of Wisconsin, in Madison, WI. In Wisconsin's graduate railroad programs and its operations classes, he taught locomotive operations performance sessions, which emphasized best practices for improving fuel economy and lowering emissions. This portion of the class involved strategies for idling locomotives, isolating extra locomotive power in the train, and shutting down locomotives in a timely fashion. Additional details of Mr. Johnson's experience are included as Exhibit 1.

Mr. Beall is a locomotive engineer with over 40 years of experience in the railroad industry. Mr. Beall worked for the Florida East Coast Railway for almost 20 years. During this period, Mr. Beall was a Qualified Yard Engineer, a Qualified Local Freight Engineer, and a Qualified Through Freight Engineer. He worked as a Switchman, Trainman, Yard Conductor, Local Freight Conductor, Through Freight Conductor, Yard Engineer, Local Freight Engineer and a Through Freight Engineer.

Since his time with the FEC, Mr. Beall has worked as an independent railroad safety and operations consultant, where he has work on a wide variety of railroad matters, including rail

fuel and air brake laws, signaling system issues, equipment standards, inspection standards, event recorder analysis, and other safety matters. Mr. Beall also operates passenger trains for the South Florida Rail Transit Authority where he is a Certified Passenger Engineer and a Qualified Passenger Conductor. Additional details concerning Mr. Beall's qualifications are attached as Exhibit 2.

II. Background on Locomotive Changes

Diesel engines first were developed over 100 years ago. The design is very reliable, and the engine runs optimally at full load. However, locomotives spend so much of their duty cycle at idle, and this results in unburned hydrocarbons building-up in the exhaust manifold. In turn, the build-up causes periods of very high emissions when the locomotive returns to forward notch position thereby burning off the hydrocarbons, which can cause fire out the stack and other undesirable consequences. For many decades, railroads have sought to change this.

In the early part of his career at GE, Mr. Johnson responded to repeated requests by the Class I railroads to save fuel and reduce emissions during idle operations. In the 1980s, the railroads focused on improving the duty cycle of their locomotives by spending less time at idle. Specifically, the railroads requested that GE develop a "low" idle setting and then "low-low" idle options. Each of these lower idle settings required testing, and each step improvement saved about a gallon of fuel per hour in the duty cycle. After these improvements reached their limits, the next step for the Class I railroads was to shut down locomotives when longer delays were expected.

If diesel engines are shut down, fuel consumption is minimized and emissions go to zero. GE, for example, encouraged shutting down locomotives after 30 minutes at idle. The

problems with the shut-down approach included weather (temperature), battery power and life, and other engine variables that made re-starting locomotives difficult. However, after years of development in Auxiliary Power Units and testing for operational limits on ambient temperature, oil temperature, water temperature, battery voltage, and air compressor pressure in the automatic train brake lines, AESS systems became viable. Over the last 10 years, U.S. railroads have been very successful at implementing the shutdown strategy through the inclusion of AESS systems in every new locomotive. Moreover, the newer locomotives are more fuel efficient, and are designed to be easier to start and stop (AESS), which makes complying with Rule 3502 a simple task. In addition, the railroads have retrofitted many older locomotives with AESS systems.

During his career at GE, Mr. Johnson became very familiar with the design and operation of diesel-electric locomotives, including the development of the AC4400 and ES44AC and ES44DC locomotives. These locomotives, along with EMD's SD70MAC and SD70Ace, have become the standard for heavy duty Class I rail service over the past decade. Almost all of these locomotives that are in service today are already equipped with AESS.

Mr. Beall is intimately familiar with the operations of the older locomotives in UP's and BNSF's fleets, including the SD40, GP60, GP40 and GP38 locomotives, which today are used primarily for switching in the BNSF and UP yards. While these locomotives do not enjoy all of the technological benefits of the newer locomotives (although some have been retrofitted with AESS systems), compliance with Rule 3502 is not a departure from current standard operating practices, and the procedures required to comply are straightforward and will not interfere with the operations of the railroads.

III. Rule 3502

Rule 3502 prohibits idling an unattended locomotive for more than 30 minutes if: (i) a crew has gone off-duty and the new crew has not arrived; (2) the crew is taking a meal break; (iii) the locomotive is within yard limits; (iv) the locomotive is waiting to be fueled or serviced; (v) maintenance or inspection work is being done that does not require an active engine. The locomotives can continue to idle if there is cold weather (below 40 degrees F.) or the locomotive batteries need to be charged.

Rule 3502 also requires the trailing engines to be shut down when the crew is informed that it will be delayed on the road for more than 30 minutes. The other exceptions apply in this case as well.

Finally, a railroad is considered to have complied with the Rule if it has a working idling control device (such as an AESS unit) on the train, set for 15 minutes, and it has not been overridden or tampered with by the operator.

IV. Complying with Rule 3502 Will Not Burden Railroad Operations

In Section V below, we detail the particular steps needed to shut down locomotive engines with and without AESS systems and the approximate time to perform such activities. However, we emphasize that none of the steps will impair the operations of the railroads. First, Rule 3502 has nothing to do with the underlying reason why a train will be parked for 30 minutes or more. Whatever operational conditions exist that necessitates a long holding period for a train simply triggers the need to comply with the Rule, but the Rule itself has no impact on any delay for the train. Second, the railroad has control over crew calling and train scheduling, which it uses to ensure compliance with its own operating rules concerning restarting of shut

down locomotives. Specifically, the railroads' own train handling rules already require that the locomotives be shut down if they are going to be left unattended. With certain exceptions, UP's rules are set at 15 minutes (Rule 31.8.7) (Exhibit 3) and BNSF's rules are set at one hour (Rule 106.3) (Exhibit 4). Thus, from an operational standpoint the railroads will be performing the exact same actions required when shutting down or restarting such engines after 15 minutes or one hour, except the engines will be shut down after 30 minutes instead of one hour on BNSF's system. In other words, whatever steps the railroads are using to follow their own operating rules now will not change as a result of their compliance with the Rule.¹

Consider this simple example, a train has traversed a crew district and it is stopping at the next crew change point in a rail yard. Usually the railroad would try to coordinate the pick-up of the crew about to go off duty with the relief crew that will take the train on its next leg. However, congestion over the next segment the train will travel has pushed the schedule back two hours. Thus, the next crew has not been called to the train. The crew going off duty is informed of the delay, and they are instructed to shut down the engines and secure the train because it will be left unattended for more than the required time under the Rule or the railroads' applicable operating rule, whichever is shorter. As most of the trains operating in the Los Angeles Basin are equipped with AESS, this crew can simply follow the several steps shown below to secure an AESS-equipped train and then be picked-up by the crew van. The AESS system will automatically shut down the engines in 15 minutes. The railroads' train operations are not impacted at all by the Rule (i.e., no additional delays are incurred and the fluidity of rail operations is not impacted).

¹ As explained in Section V, handling of distributed power locomotives may require some minor operational changes.

As for restarting service on a train with a shut-down engine, with one potential and partial exception discussed below, complying with the Rule does not require that the railroad perform any action or build in any more time than it would have if the engines were shut down and secured in accordance with the railroads' own operating rules.

Another example demonstrates the point. Consider a train without an AESS system that has been parked in a yard for two hours. Following the railroads own operating practices and Rule 3502, the previous crew shut down the locomotive and secured the train. The railroad has determined that the train can resume operation, and a crew is called. The crew will be briefed and shuttled to the train. At that point, the crew will follow one of the start-up sequences for non-AESS locomotives described below, and the train will resume operations. Rule 3502 has, once again, had no impact. The crew must take the exact same actions notwithstanding the Rule.

Even if there was a burden associated with complying with the Rule for non-AESS equipped locomotives – and the only time this might arise is on BNSF because its operating rules set a one hour time limit before it requires the crew to shut down the engines versus Rule 3502 which sets the time at 30 minutes (UP has a 15 minute limit)² – this concern is a red herring because we understand that more than 95% of the locomotives operating in the area already are equipped with AESS devices. Thus, complying with the Rule would, by definition, have no impact on most of the locomotives operating in the Los Angeles Basin, because the AESS systems should bring the railroads into automatic compliance if the system is properly set. More importantly, as explained above, the particular steps are only needed when the

² We are unsure why BNSF's time limit before shutting down a locomotive is four times greater than UP's, but UP's limit strongly suggests that complying with the Rule is not a burden on railroad operations.

locomotive or train will be left unattended for an extended period of time, which is entirely in the control of the railroads in the first instance.

V. Complying with Rule 3502 “On the Ground”

Extended locomotive idling largely is a phenomenon observed in rail yards. Crew changes, locomotive consist changes, car switching, fueling and maintenance activities all are centered around yard facilities. Many of these activities result in locomotives being left unattended. Historically, many railroaders had an ingrained habit of leaving locomotives running because, in the past, it was easier to keep the locomotive idling – not because they are difficult to shut down, but because the older locomotives were sometimes tricky to restart. But as explained above, such worries are no longer applicable given the complex locomotive status monitoring and AESS systems utilized today.

UP and BNSF have taken full advantage of the technological advancements in locomotives, and they have been aggressive in implementing fuel conservation plans that include shutting down the engines of unattended locomotives.

Below we describe the procedures for shutting down the engines of idling locomotives and the restart of those locomotives based on most of the likely scenarios that a railroad operating employee would face under the circumstances covered by Rule 3502. In some cases, an engineer, conductor, hostler, or other qualified personnel might perform these actions, consistent with typical yard operations. Thus, a crew of a particular train might not perform all of the actions below, but instead they may be aided by other qualified personnel. For example, a yard employee could be assigned the duty of shutting down the engines of a road train once it has parked in the yard.

A. Scenario 1 – Light Locomotive

1. Single Light Locomotive (assumes no AESS retrofit) - For first-generation (Ex. GP7, GP9, F3, etc.) and second-generation diesel locomotives (Ex. GP38, GP40, SD40, etc.).³
 - a. Shutdown Sequence-(approximate time 7 minutes).
 1. Place isolation switch in “Start” position.
 2. Press and hold “Stop” button until engine stops completely.
 3. Place all circuit breakers on the engineman’s control panel (ie: control, fuel pump and generator field switches) in the “Off” position.
 4. Place the reverser handle in the “neutral” position and remove lever from controller.
 5. Pull the main battery switch and turn off all switches in the distribution panel.
 6. Set a hand brake.
 7. Open cylinder test valves on engine (if more than a two hour layover is expected).
 - b. Start-Up (Cranking) Sequence (approximate time 10 minutes)
 1. Place all switches in the distribution panel as well as the battery switch into the “On” position.
 2. Place all circuit breaker switches on the engineman’s control panel in the “On” position.
 3. Place isolation switch in “Start” position.
 4. Place independent brake in the full “application” position.
 5. Check engine lube oil and water levels and oil level in governor and air compressor.
 6. Test signal alarm system by placing isolation switch in “Run” position momentarily. Blue light should come on and alarm bells should ring.

³ BNSF and UP generally use these older locomotives as switching units, helper units, or in smaller in local movements. From data collected from the California Air Resources Board website, it appears that the percentage of such locomotives operating in the Los Angeles Basin is relatively small – it is impossible to tell for certain because the CARB data are snapshots of particular days. http://www.arb.ca.gov/railyard/ryagreement/2006_2010_Inspection_data.pdf

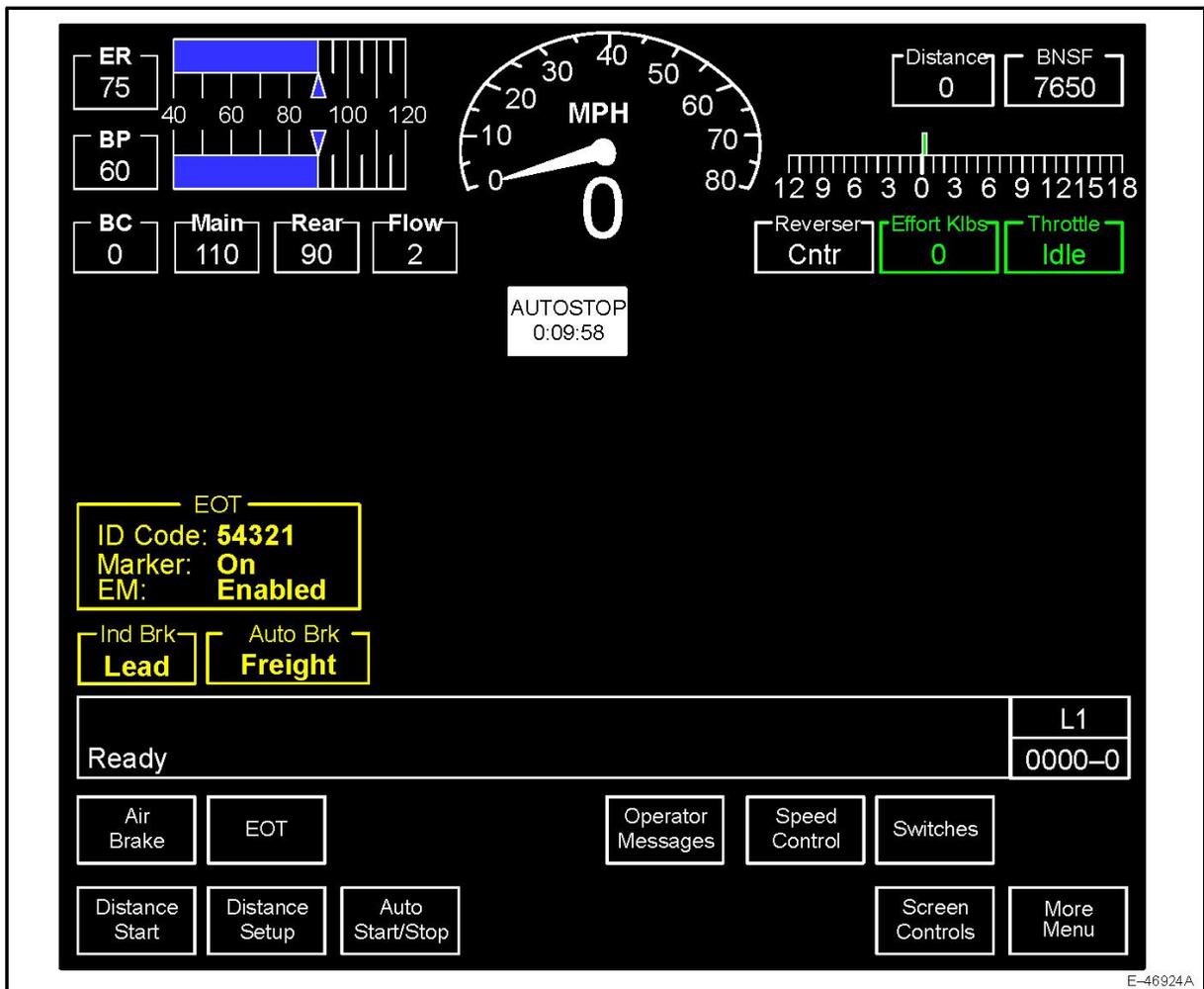
7. If engine has been shut down more than two hours, open cylinder test valves, pull layshaft closed and press “START” button on engine control panel. Crank engine over a few revolutions. Close test valves and proceed in starting engine.
 8. Press engine start button until engine starts (not more than fifteen seconds).
 9. Check oil pressure.
 10. Check starting contactor interlocks.
 11. Idle engine until water temperature comes up to 125 degrees on gauge before working engine.
 12. Place isolation switch in “Run” position.
 13. Remove hand brake after full build-up of air pressure.
2. Single Light Locomotive with AESS System:⁴
- a. Engine Shutdown (approximate crew time: one minute)
 1. Stop the locomotive.
 2. Check that Auto Start-Enabled Indicator is green (EMD); check that Auto Start-Enabled display is set to Ready.
 3. Check that Auto Start-Disable Indicator is set to “Ready-engine stop control not active” (GE Only)
 4. Center the reverser
 5. Place the combined power handle in the IDLE position
 6. Apply the independent brakes
 7. Ensure the EC switch is not set to JOG (GE only)
 8. Ensure Aux Cab door is closed (GE Only)
 9. Ensure Barrier Bar is down and BFCO switch is set to normal (GE Only)
 - b. Auto Restart (approximate crew time: one minute)
 1. Check that Auto Start-Enabled Indicator is green (EMD); check that Auto Start switch is enabled – if applicable (GE)
 2. Check that Inhibit-Disabled indicator is extinguished (EMD only)
 3. Check that throttle position is in IDLE

⁴ UP and BNSF also use the SmartStart system in locomotives that have been retrofitted with an AESS system. The instructions for operating that system are similar as shown in Exhibit 5.

4. Check the EC Switch is not set to JOG (GE Only)
5. Move to forward or reverse
6. Release independent brakes

The AESS locomotives do not need to be manually shut down under the circumstances envisioned under Rule 3502. Instead, the locomotives automatically shut off the engine once 15 minutes have elapsed – based on the automatic engine shut off settings BNSF and UP are using. Should the engine need to restart for some operational reasons, such as charging the battery, it will do so automatically. The AESS-equipped units typically inform the crew when the automatic engine shut down sequence has begun through an audible warning and, as shown below, a visual indication (i.e., the locomotive display screen will include a countdown timer).⁵

⁵ The example shown is from the operating manual of an ES44DC locomotive used by BNSF.



If a consist of light locomotives is being operated, the same sequence applies for the AESS equipped locomotives, except that the operator needs to wait four minutes before proceeding in order to allow the connected locomotives' AESS systems to restart if needed. For the light consist without AESS, the same sequence applies for each locomotive in the consist.

B. Scenario 2 – A freight train with one locomotive at the head end.

1. One head end unit (assumed no AESS retrofit) - For “first-generation” (Ex. GP7, GP9, F3, etc.) and “second-generation turbo-equipped” diesel locomotives (Ex. GP38, GP40, SD40, etc.).
 - b. Shutdown Sequence-(approximate time: 7 minutes, not including setting hand brakes on cars as necessary).

1. Place isolation switch in "Start" position.
 2. Press and hold "Stop" button until engine stops completely.
 3. Place all circuit breakers on the engineman's control panel (ie: control, fuel pump and generator field switches) in the "Off" position.
 4. Place the reverser handle in the "neutral" position and remove lever from controller.
 5. Pull the main battery switch and turn off all switches in the distribution panel.
 6. Set a hand brake.
 7. Open cylinder test valves on engine (if more than a two hour layover is expected).
 8. Set hand brakes on railcars if required by railroad operating rules (usually a specific number of handbrakes will be set based on conditions). An example of the hand brake requirements from BNSF's Air Brake and Train Handling Rules is included as Exhibit 6.
- b. Start-Up (Cranking) Sequence (approximate time: 10 minutes, not including releasing handbrakes on cars as necessary)
1. Place all switches in the distribution panel as well as the battery switch into the "On" position.
 2. Place all circuit breaker switches on the engineman's control panel in the "On" position.
 3. Place isolation switch in "Start" position.
 4. Place independent brake in the full "application" position.
 5. Check engine lube oil and water levels and oil level in governor and air compressor.
 6. Test signal alarm system by placing isolation switch in "Run" position momentarily. Blue light should come on and alarm bells should ring.
 7. If engine has been shut down more than two hours, open cylinder test valves, pull layshaft closed and press "START" button on engine control panel. Crank engine over a few revolutions. If liquid was discharged from cylinders, investigate; if not, close test valves and proceed in starting engine.

8. Press engine start button until engine starts (not more than fifteen seconds).
9. Check oil pressure.
10. Check starting contactor interlocks.
11. Idle engine until water temperature comes up to 125 degrees on gauge before working engine.
12. Place isolation switch in "Run" position.
13. Release the hand brakes on the cars.
14. Remove the locomotive hand brake after full build-up of air pressure.

2. One head end unit with AESS System.

The same shutdown and startup sequence described above is used in this Scenario. The AESS system will maintain the air brake pressure as necessary, including automatically restarting to keep the system at the proper pressure. The AESS also will ensure that the batteries remain charged and that the locomotive otherwise is ready to operate with minimal start-up time once the locomotive is reengaged by the crew.

B. Scenario 3—A freight train with two or more locomotives at the head end.

1. Two or more locomotives at the head end - For "first-generation" (Ex. GP7, GP9, F3, etc.) and "second-generation turbo-equipped" diesel locomotives (Ex. GP38, GP40, SD40, etc.).

The shut down and start up sequence is the same as that used for the single engine on the head end. The hand brakes must be applied to all of the locomotives in the consist.

2. Two or more locomotives at head end equipped with AESS.

The shut down and start up sequence is the same as that used for the single engine on the head end. However, on start up, the operator must wait four minutes or so (GE locomotives) for the other locomotives in the consist to resume operational status if they were automatically shut down by the AESS system.

C. Scenario 4 – Distributed Power

Distributed power can be different from the previous scenarios involving multiple locomotive units because one or more of the locomotive units are not directly connected to

each other. Instead the distributed power unit(s) is placed at the rear of the train, or it might be “cut-in” to the middle of the train, or both. These locomotives are operated via direct radio link with the lead head end unit rather than by direct wire connection.

The link between the distributed power unit and the lead unit is established using a series of commands on the locomotives’ on-board computer system. Once the link is established, the distributed power unit can operate in several modes, but the most common is the synchronous mode, wherein the distributed power unit mimics the operations of the lead locomotive.

Distributed power usually is used on longer road trains where the benefits of such power distribution can aid in the operating dynamics of the train and increase the number of cars that can be included in the train due to the increased horsepower capabilities and the ability of the distributed power unit to operate as a type of remote helper unit.

Shutting down distributed power engines is straightforward and the resulting benefits to fuel consumption and air quality are easily justifiable in our opinion, particularly in an area with historical air quality problems. Moreover, these trains should not generally be idling unattended for long periods of time, given the time sensitive nature of much of the traffic moving from the Los Angeles Basin. The Los Angeles Basin is the key originating area for much of the intermodal traffic handled by BNSF and UP. These trains, which often use distributed power configurations, are given high priority from dispatchers and crew callers. Thus, we would not expect that the trains would be left unattended with any regular frequency, and the shutdown procedures described below would therefore be used sparingly.

Before turning to the specific sequences that can be used to shutdown the locomotive engines on distributed power-equipped trains, we must address several preliminary matters. First, when a train is going to be left unattended, the crew necessarily will exit the train. In the typical scenario, such as a crew change, the crew will secure the train and will be picked up by a crew hauling vehicle – it might be a van, a truck, etc. The crew pick-up usually is necessary because the crew change points tend to be yard facilities, and the size of the yards are such that it is often impractical to have the crews walking to and from the yard buildings⁶ – UP’s West Colton Yard located near Colton, CA for example, is about five miles long and in the train-length layover areas of the yard there are as many as 11 tracks. Moreover, it is safer to move a crew across the tracks in a vehicle that has a radio connected to the yard superintendent/yard dispatcher office, thereby making it easier to avoid moving trains, etc.

Second, the road crews are not the only personnel handling locomotives and trains in these locations. Switching crews, hostlers, and maintenance personnel regularly handle such trains and locomotives. For example, locomotive power may be taken off a train for fueling, 92-inspections, or to be placed in other service. The yard-based personnel normally would handle such activities. These same crews will assemble the distributed power consists as well. Thus, in keeping locomotive idling to a minimum, the road crews regularly are aided by the yard crews.

1. Engine Shutdown Scenarios for DP Trains (approximate time: 20 minutes).⁷
 - a. Scenario No. 1
 - i. The train stops as it enters the yard area.
 - ii. One crew member exits the train.
 - iii. Train continues until parked.

⁶ Remote crew change locations are also served by vehicle.

⁷ The times indicated in these steps do not include setting or releasing of hand brakes on railcars as required under the railroads’ operating rules any time a train is left unattended.

- iv. The crew member that exited enters the distributed power unit.
 - v. The crew member in the lead locomotive unlinks the DP unit and returns the lead locomotive to normal operation. The AESS will reactivate.
 - vi. The crew member in the DP locomotive cancels DP operation mode and returns to normal operation mode. The AESS will reactivate.
 - vii. Both crew members follow the procedure for securing an AESS locomotive and/or head end consist.
- b. Scenario No. 2 (approximate time: 5 minutes if aided by yard personnel or 20 minutes if not aided).
- i. The train is parked in the yard.
 - ii. The lead locomotive is unlinked from the DP unit. The AESS will reactivate.
 - iii. The crew follows the procedure for securing an AESS locomotive and/or head end consist.
 - iv. The crew is picked up and taken to the distributed power unit.
 - v. The crew or a yard employee using a separate vehicle then enters the distributed power unit (a yard employee could enter as soon the train is parked).
 - vi. The crew member or yard employee ends distributed power operation. The AESS will reactivate.
 - vii. The crew follows the procedure for securing an AESS locomotive.
- c. Scenario No. 3 (approximate time: 20 minutes)
- i. The crew leaves the lead and DP units idling.
 - ii. A yard crew, using a vehicle, follows the procedures of Scenario No. 2 if it is determined after the crew has left that the train will idle for more than 30 minutes.

2. Engine Start-up Procedures

- a. Scenario No. 1 (approximate time: 20 minutes for the yard employee)
 - i. When the orders are received and a crew is assigned to the train, the yardmaster simultaneously assigns a yard employee(s) to proceed to the train.
 - ii. While the crew is receiving its mandatory briefing, the yard employee, using a vehicle, proceeds to the train and enters the

- distributed power unit and sets it in DP mode, and releases the hand brake.
- iii. The yard employee proceeds to the lead locomotive unit and relinks the distributed power unit and performs any necessary system checks, such as a distributed power brake pipe leakage test.
 - iv. The road crew arrives, performs any required checks, releases the hand brakes and proceeds.
- b. Scenario No. 2 (approximate time: 20 minutes, not including the time to take crew to the train in the first instance, which would be necessary even if the locomotives were left idling)
- i. The road crew receives its briefing.
 - ii. The road crew is shuttled to the distributed power unit.
 - iii. One crew member enters the distributed power unit and sets the unit to DP mode and releases the hand brake.
 - iv. The crew is shuttled to the lead unit.
 - v. The crew relinks the DP unit and performs any necessary system checks, such as a distributed power brake pipe leakage test.
 - vi. The crew releases the handbrake and proceeds.
- c. Scenario No. 3 (approximate time: 5 minutes, not including the time to take crew to the train in the first instance, which would be necessary even if the locomotives were left idling)
- i. The road crew receives its briefing.
 - ii. The road crew is shuttled to the lead unit.
 - iii. A yard crew proceeds to the distributed power unit and sets the unit to DP mode and releases the hand brake.
 - iv. The crew relinks the DP unit from the lead unit and performs any necessary system checks, such as a distributed power brake pipe leakage test.
 - v. The crew releases the handbrake and proceeds.

The AESS system will keep the locomotives in a state where they can resume operations easily, thereby saving time by avoiding a manual start sequence needed for a fully shut down locomotive. The distributed power linking and unlinking is all performed through the

locomotive's software. The linking and unlinking procedures are simple and straightforward.

The steps, taken from BNSF's distributed power operational instructions, are shown below:

1. Linking (Distributed Power Unit)
 - a. Select the MORE Menu.
 - b. Select the DIST POWER key from the menu options.
 - c. From the Distributed Power Main Menu, choose the REMOTE SETUP key.
 - d. Enter the LEAD IDP (or DP) unit number.
 - e. Designate the direction of the remote unit as either SAME as or OPPOSITE of the lead unit.
 - f. Press ACCEPT.
 - g. Verify LEAD CUT IN and DP ENABLED. (or DP REMOTE)
 - h. Place the independent brake valve handle in RELEASE.
2. Linking (Lead Unit)
 - a. Select the MORE Menu.
 - b. Select the DIST POWER key from the menu options.
 - c. At the Distributed Power Main Menu, select the LEAD SETUP key
 - d. Enter the number of the remote DP unit to be linked and select LINK (repeat if there are additional units)
 - e. Perform any required test, such as the brake pipe continuity test.
 - f. Release the brakes following the test
 - g. Select DP MAIN MENU
 - h. Select MODE.
 - i. Select RUN or IDLE.
 - j. Press EXECUTE.
 - k. Begin operations.
3. Unlinking (Lead Unit)
 - a. Stop the train.
 - b. Fully apply the independent brake.
 - c. Place the throttle in IDLE.
 - d. Make a 20-pound automatic brake pipe reduction.
 - e. From the right screen (or DP Main Menu):

- f. Select the system display key.
 - g. Press the UNLINK key followed by the EXECUTE key.
4. Unlinking (Distributed Power Unit)
- a. Select the distributed power key.
 - b. Select END DISTRIBUTED POWER.
 - c. Turn the DATA RADIO circuit breaker OFF (or Distributed Power and TIM breakers).
 - d. Condition the locomotive brakes for normal operation.

The linking procedures are not time consuming. Indeed, it only requires that the crew perform a few steps on the locomotives' on-board control system, which should not take more than a few minutes.

Briefly summarized, the above procedures should not add any additional train operation time on the shutdown side of the operation because, of course, the train is going to be left unattended for at least 30 minutes. Thus, there is no operational penalty for such trains because they will not resume operations for some time.

When restarting operation of the train, the crew should have enough time between its briefing and its departure time to allow for the relinking procedure, and that additional time can be factored in by the crew callers and yard superintendent in the first instance.

Alternatively, a yard crew can perform all of the necessary work before hand, or a yard crew can proceed to the distributed power unit while the road crew proceeds to the lead unit. Such activities are similar to the work done when locomotives are swapped-out or a distributed power train is configured in the first instance, except it take less time because the locomotives

and brake pipes are already connected to the train.⁸ Regardless, the train need not be delayed at all with proper planning.

V. Conclusion

Complying with Rule 3502 should not interfere with the railroads' operations. We understand that over 95% of the locomotives operating in the Los Angeles Basin are already equipped with AESS systems. For the few remaining older locomotives without AESS, none of them are likely to be used in time-sensitive road service, and both railroads already require that the units be shutdown to conserve fuel if they will not be used for an hour. Setting the shutdown time to 30 minutes for those locomotives is therefore inconsequential. As for the few distributed power trains that will dwell for more than 30 minutes unattended, as we have shown, shutting those engines down does not burden the railroad if handled properly.

⁸ According to UP, moving the locomotives to a train, connecting them to the train, connecting the brake pipes, and setting up distributed power linking takes about 30 minutes in UP's City of Industry Yard. *Distributed Power: It's a Bigger Deal than You Think*, Trains Magazine, page 28 (Sept. 2010). Here, the fastest part of the distributed power setup is all that is needed, linking the locomotives and performing the brake tests.