



Institute *for*  
**Policy Integrity**

NEW YORK UNIVERSITY SCHOOL OF LAW

October 10, 2017

To: Thomas Healy, Office of the Chief Counsel, NHTSA

Attn.: Docket No. NHTSA-2017-0059 (and Docket No. NHTSA-2017-0073)<sup>1</sup>

**Subject: Comments on Reconsideration of Final Rule on Civil Penalties**

The Institute for Policy Integrity at New York University School of Law<sup>2</sup> respectfully submits the following and attached comments regarding NHTSA's proposed reconsideration of its 2016 rule updating the civil penalties for violation of fuel economy standards.

First, NHTSA has not offered rational grounds for reconsidering a rulemaking finalized less than a year ago. NHTSA seemingly justifies its reconsideration on the grounds that “the consequences of this decision” to update civil penalties “are considerable and fairly permanent.”<sup>3</sup> But nothing has changed on that front since the agency finalized the update in 2016. Though the update was first offered as an interim final rule,<sup>4</sup> NHTSA already gave stakeholders a full opportunity to comment and, indeed, revised its initial rule in response to industry concerns.<sup>5</sup> NHTSA offers no evidence of changed circumstances in the seven months between when the December 28, 2016 rule was finalized and the July 12, 2017 reconsideration was announced, nor does the agency contend that the December 2016 proceeding was legally insufficient in any way. As courts have repeatedly ruled, “although an agency is entitled to change its policy positions, it has an obligation to adequately explain the reason for the change and its rejection of its earlier factual findings.”<sup>6</sup> NHTSA has offered no rational reason for reopening this decision now, and so the agency should not proceed with the proposed reconsideration.

If NHTSA does continue with the reconsideration, Policy Integrity offers the following comments:

- The Federal Civil Penalties Inflation Adjustment Improvements Act of 2015—and not the Energy Policy and Conservation Act of 1975—governs this regulatory proceeding. The default statutory mandate is to update penalties unless narrow exceptions apply—and those exceptions are not present here.
- Because updating the penalties would most certainly lead to net benefits, neither of the narrow exceptions under the Inflation Adjustment Act apply. In particular, any effect on sales will be of small magnitude, while updating the penalty should drive additional,

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<sup>1</sup> NHTSA instructs commenters “To ensure that your comments are correctly filed in the Docket, please include the Docket Number NHTSA-2017-0073 in your comments.” 82 Fed. Reg. 32,140, 32,143 (July 12, 2017). However, we believe that is the incorrect docket number. Regulations.gov lists this regulatory proceeding as Docket NHTSA-2017-0059.

<sup>2</sup> This document does not purport to present New York University School of Law's views, if any.

<sup>3</sup> 82 Fed. Reg. at 32,142.

<sup>4</sup> 81 Fed. Reg. 43,524, 43,526 (July 5, 2016).

<sup>5</sup> 81 Fed. Reg. 95,489, 95,490 (Dec. 28, 2016).

<sup>6</sup> *California v. BLM*, case 3:17-cv-03885-EDL (N.D. Ca, summary judgment granted Oct. 14, 2017) (citing *FCC v. Fox Television Stations*, 556 U.S. 502, 515-516 (2009)).

valuable compliance, thus generating net benefits to the environment, consumer welfare, and national security.

- The base year for adjusting the penalty to account for inflation is the original 1975 enactment of EPCA. There is a high bar for interpreting congressional silence in 2007 as tacit re-endorsement of that original penalty, and that high bar has not been met.
- NHTSA should maintain the lead time established for the updated penalty in the December 2016 final rule, and the new penalties should apply at least to model years 2019 and beyond.
- In addition to updating the real value of the original penalties to maintain the deterrent effect in the face of inflation, NHTSA should separately consider raising the absolute value of the penalty to a more optimal level, under the criteria set by EPCA. To implement EPCA's factors for increasing the penalty, NHTSA should conduct a cost-benefit analysis of alternative penalty levels and select the penalty that maximizes net benefits. The maximum penalty level authorized by EPCA in 1975 (\$10 per 0.1mpg) must also be updated under the Inflation Adjustment Act; the current maximum, therefore, should be \$47 per 0.1mpg. NHTSA should consider what penalty level, up to \$47 per 0.1mpg, is optimal.

## **I. The Inflation Adjustment Act, not EPCA, governs this proceeding, and the default mandate is to update old civil penalties**

Congress adopted the Inflation Adjustment Act of 2015 with a clear purpose: to maintain the deterrent effect of civil penalties set years ago by counteracting inflation, and to improve federal collections of penalties.<sup>7</sup> Those goals are distinct from the provisions for adjusting penalties written into the original Energy Policy and Conservation Act of 1975, which were intended to allow NHTSA to “substantially further substantial energy conservation.”<sup>8</sup> The Inflation Adjustment Act was meant to maintain the real value of penalties as originally set in order to maintain the original deterrent effect, while EPCA was intended to allow NHTSA to increase the absolute value of the penalty to increase compliance. The December 2016 rule implemented the mandate under the Inflation Adjustment Act by maintaining the real, inflation-adjusted value of the CAFE penalties; the December 2016 rule did not rely on NHTSA's separate authorities under EPCA,<sup>9</sup> nor did it attempt to adjust the absolute value of the penalty above and beyond the inflation-correction. Therefore, any reconsideration of that December 2016 rule promulgated under the Inflation Adjustment Act must likewise follow the statutory mandates of the Inflation Adjustment Act. The criteria from EPCA on adjusting the absolute value of the penalty are not relevant to this rulemaking on updating the real value of the penalty to counteract inflation (though NHTSA should considered using its separate EPCA authorities in a separate rulemaking, as discussed below).

Over time, the real value of a penalty falls if not adjusted by inflation. The inflationary updates to the CAFE penalties are intended to maintain the level of deterrence effectuated by the civil monetary penalties, and to prevent the deterrent effect from being diminished by inflation. With nominal prices in the economy increasing over time, keeping the value of the penalty constant in

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<sup>7</sup> Pub. L. 114-74 § 701(b)(2)(b) (2015) (“The purpose of this Act is to establish a mechanism that shall allow for regular adjustment for inflation of civil monetary penalties; maintain the deterrent effect of civil monetary penalties and promote compliance with the law; and improve the collection by the Federal Government of civil monetary penalties.”).

<sup>8</sup> 49 U.S.C. § 32,912(c)(1)(A)(i).

<sup>9</sup> While NHTSA does explain that its December 2016 “effectively responds” to a petition to adjust the penalties under EPCA, that was because the Inflation Adjustment Act effectively mooted the petition's request. 81 Fed. Reg. at 95,491. NHTSA did not cite EPCA as authority for the December 2016 rule.

current dollars deteriorates its real value. As the CAFE penalty's level has been essentially unchanged since 1975, incentives to comply with fuel economy have been strongly degrading over the time. Since 1975, inflation has increased indexed consumer prices by over 350%.<sup>10</sup> As a result, a penalty first set in 1975 has lost significant deterrent effect.

In 2015, Congress decided to remedy that problem, and mandated ("shall adjust"<sup>11</sup>) that agencies update their civil penalties unless one of two narrow exceptions apply: (1) if increasing the penalty "will have a negative economic impact," or (2) "the social costs of increasing the civil monetary penalty...outweigh the benefits."<sup>12</sup> As neither exception applies here, NHTSA must update the penalties for inflation, consistent with the December 2016 rule.

## **II. The data most likely cannot support an agency finding of significant negative economic impact from updating the penalties**

NHTSA has not shown that the penalties will have a "negative economic impact." As NHTSA acknowledges, OMB has already determined that such circumstances were intended to be "rare."<sup>13</sup>

Though Congress did not define the phrase, any rational understanding of "negative economic impact" should include some showing of a significant and net negative economic impact. The mere existence of some negative effect on some individual cannot be enough to invoke the exception, because otherwise the exception would swallow the rule. Any increase in the CAFE penalty could diminish profits for those individual firms that would not comply with the standards but for this inflation adjustment (i.e., counterfactual "non-compliant" firms). If that were sufficient grounds to invoke the exception, the exception would always apply and would not be narrow and "rare" as intended.<sup>14</sup> Instead, the impact must be a significant impact, and significance is best measured by comparison to other costs and benefits.<sup>15</sup> Indeed, there is substantial overlap between the analysis necessary under this exception and the second exception, which specifically compares social costs and benefits. Overall, the exception is only warranted if updating the penalty would have a significant, net negative effect. Those circumstances do not apply here.

In addition, NHTSA already concluded in 2016 that no exception to the Inflation Adjustment Act was warranted.<sup>16</sup> NHTSA does not now offer any evidence of changed circumstances that would justify revisiting that determination. Nor has NHTSA explained its changed position.

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<sup>10</sup> The Consumer Price Index Calculator maintained by the Bureau of Labor Statistics shows that \$5 in 1975 has the same buying power as \$23.56 today. <https://data.bls.gov/cgi-bin/cpicalc.pl?cost1=5.00&year1=197501&year2=201708>.

<sup>11</sup> Pub. L. 114-74 § 701(b)(4)(b)(1)(A) ("the head of an agency shall adjust civil monetary penalties through an interim final rulemaking").

<sup>12</sup> Pub. L. 114-74 § 701(b)(4)(c)(1); *id.* at (2) (OMB must also concur with the determination).

<sup>13</sup> Shaun Donovan, OMB Director, Memorandum to Heads of Executive Departments and Agencies, on Implementation of the Federal Civil Penalties Inflation Adjustment Act Improvements Act of 2015 (Feb. 24, 2016), <https://www.whitehouse.gov/sites/whitehouse.gov/files/omb/memoranda/2016/m-16-06.pdf>

<sup>14</sup> *Id.*

<sup>15</sup> This is in the spirit of any cost-benefit analysis and is based on Kaldor-Hicks type of welfare criterion, which assumes that, as almost any change makes some people better off and others worse off, the welfare effects of a change need to be evaluated by reference to whether gainers could compensate losers for their losses. See Nicholas Kaldor, *Welfare Propositions in Economics and Interpersonal Comparisons of Utility*, 49 THE ECONOMIC JOURNAL, 549-552 (1939).

<sup>16</sup> 81 Fed. Reg. at 95,490 (granting industry's petition to exempt earlier model years not on the grounds of a "negative economic impact," but rather only because such penalties would be retroactive punishment inconsistent with congressional intent); *more generally id.* (updating the penalties under the mandate of the Inflation Adjustment Act, and not invoking the exemptions).

In this section of our comments, we review why the negative impacts of the inflation-adjusted penalties should be of small magnitude, by looking at how the changes in penalty rate affect the manufacturers' costs and, consequently, vehicle sales, and employment. In the next section, we review why the positive impacts could be significant, and thus why social benefits will very likely outweigh social costs.

#### *Effect of penalty changes on manufacturers' production costs*

Any negative effects of higher penalties on profits would be experienced only by those firms that, in the absence of the inflation adjustment, would not comply with the standards (i.e., the "counterfactual non-compliers"). As explained below, those firms would need to bear additional costs due to ramping up of their compliance efforts and increased penalties for deviations from the standard.

The number of "counterfactual non-compliers" depends on how expensive adherence to the standards is. The data does not suggest that CAFE requirements have, so far, been very costly to comply with. The vast majority of companies has consistently complied with the standards, despite the penalties being relatively low and almost constant in nominal terms from 1975 through 2016. In spite of the increases in stringency of standards, the aggregate penalty payments by industry in years 1985-2013 remained roughly stable at the yearly level of about \$30 million,<sup>17</sup> according to the data gathered by NHTSA.<sup>18</sup> The average penalty paid by a company has also stayed at a similar level over the years.

The CAFE penalties work like safety valves, because they allow the car manufacturers to avoid the requirements imposed by vehicle standards in case the compliance costs are too high. Such penalty systems, which give the manufacturers flexibility on their compliance options, are a common element of environmental regulation, and are viewed as price ceilings that limit high-side abatement cost risk.<sup>19</sup> In the case of CAFE requirements, penalties effectively determine the upper limit to the compliance costs per vehicle, capping the cost of the vehicle standards on industry.

The economics of safety valves are well understood.<sup>20</sup> In particular, it is clear that the compliance efforts firms are willing to exert depends on the penalty itself. Whenever the marginal costs of compliance with the rules exceed the penalty, companies choose to pay penalties. Increasing the penalty raises the amount the companies are willing to spend on compliance, bringing them closer to the standards.

Because of the "safety valve" properties in the design of the punishment, one can learn a great deal about the compliance costs from the information on penalties paid. In particular, it can be concluded that for the compliant manufacturers, the marginal costs (in form of technological adaptations and changes in the design of the cars) have not been higher than \$5.5 per year, per car,

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<sup>17</sup> In recent years, the penalty payments started decreasing, probably due to the possibilities of credit trades between the manufacturers. See below for further discussion of interactions between CAFE penalties and credits.

<sup>18</sup> The data is publicly available at [https://one.nhtsa.gov/cafe\\_pic/CAFE\\_PIC\\_Fines\\_LIVE.html](https://one.nhtsa.gov/cafe_pic/CAFE_PIC_Fines_LIVE.html).

<sup>19</sup> John K Stranlund, *The Economics of Enforcing Emissions Markets: A Review of the Literature*, 11 REV. ENVIRON. ECON. POLICY 227–246 (2017).

<sup>20</sup> Henry D. Jacoby & A. Denny Ellerman, *The safety valve and climate policy*, 32 ENERGY POLICY 481–491 (2004), William A. Pizer, *Combining price and quantity controls to mitigate global climate change*, 85 J. PUBLIC ECON. 409–434 (2002), John K Stranlund, *The Economics of Enforcing Emissions Markets: A Review of the Literature*, 11 REV. ENVIRON. ECON. POLICY 227–246 (2017).

per 0.1 mpg added to meet the standards. For non-compliant firms, costs (in the form of penalties) were exactly \$5.5 per 0.1 mpg.

Using this logic, it is possible to approximate the future increases in cost per vehicle caused by the inflationary adjustment of the penalty. Specifically, the upper bound for the rise in costs for a given manufacturer can be obtained by multiplying its predicted non-compliance in 0.1 mpg<sup>21</sup> by \$8.5 (the difference between the new and old penalty rates). The approach would thus require identifying the “counterfactual non-compliers” and their counterfactual deviations from the standards. While this is a challenging task, for some vehicles it is already known that they will meet the CAFE requirements in the future. For example, EPA identified in 2016 over 100 car, SUV, and pickup versions on the market today that already meet 2020 or later greenhouse gas standards.<sup>22</sup> It is important to recognize that the compliant firms’ profits will not be negatively affected by changes in punishment scheme. (In fact, the profits of the compliant firms will increase through the credit trading mechanism. Please see section below for further explanation.)

The actual cost increase will be lower than the above described upper bound. The inflation-adjusted penalty will change the incentives for compliance, causing the firms with marginal compliance cost between \$5.5 and \$14 to boost their fuel efficiency efforts. For those switching firms, the rise in costs will be determined by their marginal compliance costs which, by definition, will be lower than \$14. The change in average costs per vehicle will therefore approximately equal the difference between the marginal abatement cost and the old penalty, multiplied by the average deviation from the standard.<sup>23</sup> If the abatement costs are close to the old penalty, for example around \$6, the updated penalties would strongly improve compliance (thus contributing to emission savings and decreasing the total penalty payments), while having a low impact on the manufacturers’ profits.

Any analysis of such effects needs to also take into consideration an additional flexibility mechanism: trading of compliance credits. Higher penalties raise the value of credits. As the value of compliance credits increases, the companies with the lowest fuel efficiency costs will implement more fuel efficiency in their cars to create additional credits and sell those to non-compliers. This further reduces the total penalty payments and decreases emissions, while decreasing the total costs of compliance and creating some profit redistribution between the manufacturers.

To claim that the inflation-adjusted penalties translate into a substantial cost surge for automobile manufacturers, the agency would need to prove that the marginal compliance costs for the “counterfactual non-compliers” are closer to \$14 than to \$5.5. NHTSA would further need to show that there are many of the “counterfactual non-compliers” and that their individual deviations from standards would be large. NHTSA would also have to show that there is no room for substantial decreases in payments through credits trading. In such analyses, the agency must avoid relying on

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<sup>21</sup> Non-compliance per vehicle is understood for the purpose of this exposition as the number of mpg that, in the absence of penalty adjustments, the fleet would deviate from compared to the relevant mpg stipulated in the CAFE standard.

<sup>22</sup> Given the close harmonization of GHG and CAFE standards, this finding suggests that the vehicles will also comply with CAFE standards. See EPA, Proposed Determination on the Appropriateness of the Model Year 2022-2025 Light-Duty Vehicle Greenhouse Gas Emissions Standards under the Midterm Evaluation, EPA-420-R, at 50 (2016) for more information on compliance projections.

<sup>23</sup> Since the standards are for fleet averages, the manufacturers seek to improve the fuel economy in those vehicles where it is the cheapest to do so or to promote more sales of fuel-efficient cars. Both effects further inhibit the cost growth.

any self-reported data, as it is in manufacturers' interest to overstate compliance costs. Finally, to show a substantial and net negative impact, NHTSA would need to compare these effects to the other effects of the updated penalties.

Invoking this exception therefore requires NHTSA to clear a high analytical hurdle, which existing data very likely do not support.

#### *Effect of penalty changes on car sales*

Elevated penalty rates may cause the "counterfactual non-compliant" car fleets to become more expensive and more fuel efficient. The degree to which the price increase would happen depends on the increases in manufacturers' costs discussed above and the degree to which the companies can pass higher costs to the consumers (i.e., the "pass through" rate).<sup>24</sup> The compliant fleets' prices will stay unaltered or could slightly fall, even as the compliant fleet becomes more fuel efficient as an effect of increased demand for compliance credits. The total sales effect of those two mechanisms (price and fuel economy change) will depend on the consumer valuation of fuel efficiency.<sup>25</sup> In general, one can expect the net effect to be rather small, especially if non-compliance is largely restricted to luxury cars.<sup>26</sup> Historically, it has been the case that penalties were paid almost exclusively by European manufacturers of luxury vehicles.

There will also be some substitution between the "counterfactual non-compliant" and compliant fleets, because of the change in their relative prices. This effect will contribute further to decreases in total emissions. However, the substitution may be of small magnitude if compliant and non-compliant vehicles come from different market segments.

#### *Effect of penalty changes on employment*

If the increases in automobile price for the "counterfactual non-compliant" fleet due to higher penalties exceed the consumer's valuation of the associated fuel savings, the consumer demand for that fleet could be reduced. Clearly, the vehicle manufacturers will spread the fuel economy adjustments across their fleet in a way that minimizes total sales losses.<sup>27</sup> On the other hand, the technologies used for compliance with fuel efficiency standards may differ from the counterfactual technologies in terms of the amount of labor needed to produce one automobile (the labor intensity) or the degree to which the technology relies on imports and thus fosters employment abroad instead of domestic jobs (import content). Both of the effects may change employment in automobile sector, however, they are confined to counterfactual non-compliers only.<sup>28</sup> Besides, the magnitude of the sales effect is determined by the manufacturers' marginal abatement costs. Should the cost be close the old penalty, the sales change will be near zero.

Importantly, workers laid off from the automobile sector and adjacent businesses may quickly be absorbed by other industries due to general equilibrium effects and the currently robust labor market leading to no changes in economy-wide employment. For more discussion on why the CAFE standards overall will likely have, at most, small employment effects that will be partly offset by

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<sup>24</sup> For the discussion on the importance of pass-through rate for estimating the impact of vehicle standards on vehicle prices see our attached comments on jobs and preferences, submitted to EPA and NHTSA on their proposed reconsideration of the midterm evaluation.

<sup>25</sup> *Id.*

<sup>26</sup> The relative impact of penalty increase is there is much smaller as those vehicles sell for substantially higher prices.

<sup>27</sup> See our attached comments on jobs and preferences, *supra*.

<sup>28</sup> Historically, the penalties were paid mostly by European manufacturers.

changes in the broader labor market, please see our attached comments that were submitted last week to EPA and NHTSA on their proposed reconsideration of the midterm evaluation.

#### *Interaction between the level of CAFE standards and the penalty*

The agency has based this proposed reconsideration in part on the fact that “CAFE standards are set to rise at a significant rate over the next several years,”<sup>29</sup> but in a separate proceeding, NHTSA has proposed to reconsider the midterm evaluation with the possible intention of revising the standards downwards.<sup>30</sup> Should NHTSA lower the standards for model years 2021 and beyond from the standards announced by the agency back in 2012, it would no longer have even its stated justification for lowering the penalties to rely on in this proceeding. Should the vehicle standards be indeed relaxed (and they should not be, as we have argued in separate comments to EPA and NHTSA<sup>31</sup>), the possible arguments against penalty increases become even weaker. First, failing to increase the standards in model years 2021 and beyond, combined with failing to update the penalties for model years 2019 and beyond, would imply double penalty relief for non-compliers starting with model year 2021. On the other hand, the manufacturers that have already made investments to comply with CAFE and will not change their fleet in response to the standards being adjusted downwards would be at a relative disadvantage compared to “counterfactual non-compliers.” The diminished penalties would bring them no direct gain; instead they would lose profits because of the decreased value of their compliance credits. Such a situation would punish compliance and reward non-compliance, thereby defying the goal of penalties. Second, the potential for negative economic impact would be lower with weaker standards,<sup>32</sup> while the benefits of enforcement would increase.

### **III. The social benefits of updating the penalties outweigh the costs**

As explained above, an increase in penalty raises the amount the companies are willing to spend on compliance. It can therefore be expected that, in response to the inflation-updated penalties, some otherwise non-compliant manufacturers will accelerate their fuel efficiency efforts and improve their fleet fuel performance. The degree to which this will happen depends on the marginal compliance costs of the non-compliers.<sup>33</sup> Industry has argued that “raising the penalty would have no impact on fuel savings and would simply hurt the manufacturers forced to pay it,”<sup>34</sup> but that is not plausible given what is known about compliance costs.

The boosts to fleet performance from updated penalties translate into reductions in greenhouse gas emissions and improvements in air quality and public health. Additionally, they lead to fuel savings for consumers. Those will be especially relevant if consumers do not fully account for the full value of fuel efficiency in their car purchase decisions, for example because of inattention or lack of information.<sup>35</sup> In such a case, the fuel economy of the vehicles will not be fully reflected in the vehicle price but should be counted towards social gains.

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<sup>29</sup> 82 Fed. Reg. at 32,141.

<sup>30</sup> 82 Fed. Reg. at 39,551.

<sup>31</sup> See our attached comments on jobs and preferences, and on the social cost of greenhouse gases.

<sup>32</sup> The number of manufacturers directly affected by changes in penalty rates decreases with relaxing the standards as, mechanically, lower standards imply higher compliance rates.

<sup>33</sup> The analysis of improvements in fuel standards due to penalty increases mirrors the attempts to quantify the additional penalty payments that the manufacturers will need to make.

<sup>34</sup> 75 Fed. Reg. 25,323, 25,667 (May 7, 2010).

<sup>35</sup> See our attached comments on jobs and preferences for discussion on the consumer valuation of fuel efficiency.

When the marginal abatement costs of the non-compliant car manufacturers are lower than \$14 per 0.1mpg, one may expect to observe a compliance rate close to 100%, with all the wide benefits of it easily quantifiable. To claim that there will be no substantial improvement in compliance (and, consequently, no associated benefits), the agency would need to show that for non-compliers marginal compliance costs well exceed \$14 per 0.1mpg (yearly). That does not seem reasonable given the predicted costs for various fuel efficiency technologies and designs discussed in Midterm Evaluation of Light-Duty Vehicle Greenhouse Gas Emission Standards.<sup>36</sup>

If NHTSA decides to reverse or lower the penalty, NHTSA must provide an explanation for disregarding the “facts and circumstances that underlay” the original rule.<sup>37</sup> As such, NHTSA would need to calculate the amount of lost benefits, including the benefits described above, that would be caused by any reconsideration and provide an explanation for depriving the public of those benefits.<sup>38</sup>

To value the changes in greenhouse gas emissions associated with changing the CAFE penalties, NHTSA should use the social cost of greenhouse gas methodology, as discussed in our attached comments submitted several weeks ago to NHTSA on the scoping for its environmental impact statement.

#### **IV. The base year for inflation should be 1975**

NHTSA asks commenters whether 2007 should be considered the base year for inflation, rather than 1975, because Congress updated other aspects of the CAFE program in the Energy Independence and Security Act of 2007 (EISA). Yet, EISA is completely silent on CAFE penalties. To interpret that silence as tacit re-endorsement of EPCA’s original penalties set in 1975 is akin to drawing a negative inference. Courts typically require a high bar for making a negative inference.<sup>39</sup> Unless NHTSA can identify clear evidence in the legislative history that Congress specifically considered the original penalties from 1975 and determined, through enacting EISA, to re-endorse maintaining those penalties without adjustment, then 1975 is still the appropriate base year for inflation. Treating 1975 as the base year best fulfills the intentions of Congress in 1975 to set a particular minimum level of deterrence, and of Congress in 2015 to maintain original levels of deterrence over time by updating penalties.

#### **V. No additional lead time is necessary to implement the adjusted penalties**

NHTSA asks how much lead time it should provide if it adopts a penalty level other than \$14. First, NHTSA should not lower the penalty from \$14. But if it does, manufacturers do not need additional lead time to comply with a lower penalty. If anything, lowering the penalty would mean less lead time is necessary. In December 2016, NHTSA delayed implementation of the inflation adjustment until model year 2019, explaining that some additional lead time was warranted because industry design and production cycles were fixed years in advance, such that it may be difficult to increase

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<sup>36</sup> Draft Technical Assessment Report: Midterm Evaluation of Light-Duty Vehicle Greenhouse Gas Emission Standards and Corporate Average Fuel Economy Standards for Model Years 2022-2025, Office of Transportation and Air Quality U.S. Environmental Protection Agency, National Highway Traffic Safety Administration U.S. Department of Transportation, And California Air Resources Board (2016).

<sup>37</sup> *F.C.C. v. Fox Television Stations, Inc. (“Fox”)*, 556 U.S. 502, 515 (2009).

<sup>38</sup> *See, e.g., California v. BLM*, slip op. at \*18-19 (No. 17-cv-03804) (N.D. Cal. Oct. 4, 2017).

<sup>39</sup> Courts require “confiden[ce]” that Congress specifically considered the matter. *See e.g., Shook v. District of Columbia Fin. Responsibility and Management Assistance Auth.*, 132 F.3d 775, 782 (D.C. Cir. 1998).

compliance rates without several advance years of lead time.<sup>40</sup> Not only might manufacturers be able to decrease their compliance rates in response to a lower penalty without several years of lead time, but NHTSA need not be in the business of facilitating lower compliance rates for its duly adopted regulations.

Penalties should be updated starting with model year 2019, as originally planned. Manufacturers are already on notice, and do not need additional lead time to comply.

## **VI. In a separate rulemaking, NHTSA should consider further raising the absolute penalties under EPCA**

Apart from the inflationary considerations, there are additional reasons for the agency to raise the absolute value of penalties.

The first reason is related to the growing stringency of CAFE. The vehicle standards have been in place for some 40 years, pushing the U.S. car market towards more and more efficient vehicles over time to ensure fuel savings. For example, the requirements for very small passenger cars began with a modest level of 18 mpg in 1978 and have been increasing, reaching 27.5 mpg in 1990 and 30.2 in 2011, and are set to go up to 60 mpg in 2025. The automobile industry has been able to update its technologies and designs to keep pace with the incremental increases in the standards. Presumably, however, the costs of compliance have also been growing through the years and will continue to do so in the future.<sup>41</sup> Given the option of paying a penalty instead of complying, the manufacturers largely make their decisions on fuel efficiency improvements based on the penalty system. For them, raising their fuel efficiency makes sense only up to the point where the marginal cost of compliance equals the penalty. Growing marginal compliance costs combined with constant penalty rate implies that over the years the violations of the standards may become more prevalent. Keeping the compliance constant would thus require heightening the penalty rates.

Additional support for changes in the absolute penalty comes from the economic literature on optimal penalties. From a societal perspective, it would be optimal for the agency to set the penalty equal to the social harm arising from non-compliance.<sup>42</sup> The social harm will encompass mostly the externalities associated with gas-guzzling vehicles, including emissions of greenhouse gases, criteria pollutants, and toxic pollutants.<sup>43</sup> It is not apparent that \$5 was the optimal penalty when Congress set it as the minimum penalty in 1975, and so it is not apparent that, even after adjusting for inflation, \$14 will be the optimal penalty. For example, if a passenger car manufacturer in 2007 missed the standard by one mpg, it would imply an extra 381.7 gallons of fuel used during the lifetime of the car.<sup>44</sup> Burning a gallon of gasoline that does not contain fuel ethanol produces around

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<sup>40</sup> 81 Fed. Reg. at 95,490.

<sup>41</sup> For the information on the predicted costs paths for the model years up to 2025, see Draft Technical Assessment Report: Midterm Evaluation of Light-Duty Vehicle Greenhouse Gas Emission Standards and Corporate Average Fuel Economy Standards for Model Years 2022-2025, Office of Transportation and Air Quality U.S. Environmental Protection Agency, National Highway Traffic Safety Administration U.S. Department of Transportation, And California Air Resources Board (2016)

<sup>42</sup> For the seminal contribution on economics of penalties see Gary S. Becker, *Crime and Punishment: An Economic Approach*, 76 J. POLIT. ECON. 169–217 (1968).

<sup>43</sup> Phase 2 Fuel Efficiency Standards for Medium- and Heavy-Duty Engines and Vehicles. Final EIS NHTSA-2014-0074, National Highway Traffic Safety Administration (2016).

<sup>44</sup> Assuming lifetime vehicle mileage of 278,134, as in EPA (2016), p. 10-8.

19.6 pounds of CO<sub>2</sub>,<sup>45</sup> which, combined with the 2007 social cost of carbon of \$28 per ton,<sup>46</sup> yields a carbon cost of non-compliance in value of almost \$100 per mpg. This value constitutes only a part of the social harm that is induced by non-compliance, as it does not consider other effects like the health consequences of non-GHG polluters. Clearly, the penalty of \$55 per mpg (\$5.5 per 0.1mpg) was lower than the social costs associated with carbon alone. Therefore, current CAFE penalties, even after adjusting for inflation, are likely below the optimal penalty.

EPCA contains authority to adjust penalties to a higher amount if NHTSA determines that the increase will “substantially further substantial energy conservation” and “will not have a substantial deleterious impact on the economy of the United States, a State, or a region.”<sup>47</sup> In 1975, EPCA set a maximum level to which NHTSA could raise the penalty: \$10 for each 0.1 mpg.<sup>48</sup> However, the Inflation Adjustment Act mandated the inflation not just of “a specific monetary amount as provided by Federal law” (such as the \$5 minimum originally set in 1975), but also “a maximum amount provided for by Federal law.”<sup>49</sup> Using the CPI inflation calculator, the \$10 maximum penalty set in 1975 should be updated under the IAA to \$47 today. Therefore, NHTSA has authority to increase the absolute penalty up to \$47 per 0.1 mpg.

NHTSA should undertake a rulemaking to explore its authority under EPCA to raise the absolute value of penalties. Under EPCA, to weigh substantial energy conservation against substantial deleterious impacts, NHTSA should use a full cost-benefit analysis and select the penalty that maximizes net benefits.

Sincerely,

Sylwia Bialek, Economics Fellow

Jason Schwartz, Legal Director

Attached:

Comments from Policy Integrity, to EPA & NHTSA, on Request for Comment on Reconsideration of the Final Determination of the Mid-Term Evaluation of Greenhouse Gas Emissions Standards for Model Year 2022-2025 Light-Duty Vehicles

Joint Comments from Policy Integrity et al., to NHTSA, on Quantifying and Monetizing Greenhouse Gas Emissions in the Environmental Impact Statement for Model Year 2022-2025 Corporate Average Fuel Economy Standards

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<sup>45</sup> Energy Information Administration <https://www.eia.gov/tools/faqs/faq.php?id=307&t=11>

<sup>46</sup> For simplification, the social value of carbon from 2007 was used for the whole lifecycle of the vehicle. The proper valuation would assign the miles driven in individual years the appropriate value of carbon which would result in substantially higher evaluation of harm as the cost of carbon is quickly increasing over time. For the numbers see Interagency Working Group on Social Cost of Greenhouse Gases, *Technical Support Document: Technical Update of the Social Cost of Carbon for Regulatory Impact Analysis Under Executive Order 12866*. (2016), at 16.

<sup>47</sup> 49 U.S.C. § 32912(c).

<sup>48</sup> 49 U.S.C. § 32912(c)(1)(C).

<sup>49</sup> Definition of a “civil monetary penalty” under the Inflation Adjustment Act of 2015.