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February 2, 2024

## **Comments of the Competitive Enterprise Institute**

RE: Petition for Rulemaking of PIRG and iFixit

Docket ID No.: FTC-2023-0077

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## Introduction

On behalf of the Competitive Enterprise Institute (CEI), we respectfully submit comments on the Petition for Rulemaking to Protect Consumer's Right to Repair (Petition) by the U.S. Public Interest Research Group Education Fund (US PIRG or PIRG) and iFixit (together "Petitioners"). Founded in 1984, the Competitive Enterprise Institute is a non-profit research and advocacy organization that focuses on regulatory policy from a pro-market perspective.

The Petition for Rulemaking by US PIRG and iFixit should be denied in whole. Petitioners fail to comply with the Federal Trade Commission's procedures for rulemaking to such an extent that it severely limits the public's ability to comment on the proposed action. Further, the Petition asks the Federal Trade Commission (FTC or Commission) to exercise rulemaking authority that it does not have. Finally, the Petitioners request the promulgation of rules that would harm consumers and competition more than it would help.

## I. The Petition fails to comply with 16 C.F.R. § 1.31.

PIRG and iFixit petition the FTC to promulgate rules governing consumer's right to repair products and devices pursuant to 16 C.F.R. § 1.9, which governs petitions to commence trade regulation rule proceedings under Section 18(a)(1)(B) of the FTC Act. Petitions to the FTC for trade regulation rulemaking or for any other rulemaking must be handled pursuant to the procedures prescribed in 16 C.F.R. § 1.31.<sup>1</sup>

Under 16 C.F.R. § 1.31(b)(2), Petitions are required to include "[a] full statement of the action requested by the petitioner, *including the text and substance* of the proposed rule or amendment . . . ." (emphasis added). While PIRG's and iFixit's Petition may include the substance of a proposed rule, it fails to include the "text . . . of the proposed rule." Thus, Petitioners fail to conform with 16 C.F.R. § 1.31(b)(2), and the FTC should deny the Petition in whole pursuant to 16 C.F.R. § 1.31(g).

Inclusion of the text of the proposed rule allows the public to better participate in the petition for rulemaking process. When the FTC voted to make changes to the petition process in September 2021, former commissioner Rohit Chopra said, "[u]nfortunately, Commissioners spanning multiple administrations pursued a more secretive and less accountable policy . . . ."<sup>2</sup> Further, former commissioner Chopra said, "This is another important step to be more transparent, to promote democratic debate, and to rebuild trust in the Federal Trade Commission."

It would be inappropriate for the FTC to grant this petition in whole or in part, because the public would not have an adequate opportunity to comment on the text of the rule that Petitioners are requesting the FTC to promulgate. This would degrade the trust the Commission sought to

<sup>&</sup>lt;sup>1</sup> 16 C.F.R. §§ 1.9, 1.25.

<sup>&</sup>lt;sup>2</sup> Prepared Remarks of Commissioner Rohit Chopra Regarding New Procedures to Ensure the Right to Petition the FTC, Federal Trade Commission, September 15, 2021,

https://www.ftc.gov/system/files/documents/public\_statements/1596344/p072104choprastatementpetitionrulemakin\_g.pdf.

rebuild and be contrary to the type of democratic debate that the Commission intended to promote when adopting 16 C.F.R. § 1.31.

# **II.** The FTC does not have the authority to promulgate substantive rules defining unfair methods of competition.

Petitioners request that the FTC initiate rulemaking under Section 5 of the Federal Trade Commission Act "to protect consumers' right to repair their devices to prevent unfair methods of competition."<sup>3</sup> While the FTC does have rulemaking authority under 15 U.S.C § 57a for unfair or deceptive acts or practices, the Commission does not have the authority to promulgate substantive rules for unfair methods of competition.

Last January, for the first time in over 50 years, the FTC initiated an unfair methods of competition rulemaking. It asserted this authority under Sections 5 and 6(g) of the FTC Act. It is true that Congress granted rulemaking authority for the purpose of "carrying out" that Act, as Section 6(g) granted the Commission the power to "classify corporations and . . . make rules and regulations for the purpose of carrying out the provisions" of the FTC Act. However, Section 6(g) only grants procedural or ministerial rulemaking authority for the purpose of carrying out the "FTC Act's defining feature of case-by-case adjudications," according to former FTC Commissioner Maureen K. Ohlhausen and former Assistant Attorney General for the U.S. Department of Justice's Antitrust Division James Rill.<sup>4</sup>

Congress did not grant any statutory penalties in the FTC Act. Professors Thomas Merrill and Kathryn Watts, in their 2002 *Harvard Law Review* article, explained that at the time of the FTC Act's passage, "Congress followed a drafting convention that signaled to agencies whether particular rulemaking grants conferred authority to make rules with the force of law as opposed to mere housekeeping rules."<sup>5</sup> According to Merrill and Watts,

That convention was simple and easy to apply in most cases: If Congress specified in the statute that a violation of agency rules would subject the offending party to some sanction—for example, a civil or criminal penalty; loss of permit, license, or benefits; or adverse legal consequences—then the grant conferred power to make rules with the force of law. Conversely, if Congress made no provision for sanctions for rule violations, the grant authorized only procedural or interpretive rules.<sup>6</sup>

https://www.uschamber.com/assets/archived/images/ftc\_rulemaking\_white\_paper\_aug12.pdf.

<sup>&</sup>lt;sup>3</sup> U.S. Public Interest Research Group Education Fund and iFixit, Petition for Rulemaking to Protect Consumers' Right to Repair, before the United States Federal Trade Commission, November 14, 2023, p. 49 [hereinafter Petition], <u>https://www.regulations.gov/document/FTC-2023-0077-0020</u>.

<sup>&</sup>lt;sup>4</sup> Maureen K. Ohlhausen and James Rill, *Pushing the Limits? A Primer on FTC Competition Rulemaking* (U.S. Chamber of Commerce, August 12, 2021), p. 12,

<sup>&</sup>lt;sup>5</sup> Thomas W. Merrill and Kathryn Tongue Watts, "Agency Rules with the Force of Law: The Original Convention," *Harvard Law Review*, Vol. 46, p. 472 (2002), <u>https://scholarship.law.columbia.edu/faculty\_scholarship/375</u>. <sup>6</sup> Ibid.

Further, as former Commissioner Ohlhausen and former FTC senior attorney Ben Rossen explain,

The original FTC Act contained only one sentence describing the agency's ability to make rules, buried inconspicuously among various other provisions. Section 6(g) provided that the FTC would have authority "[f]rom time to time [to] classify corporations and . . . to make rules and regulations for the purpose of carrying out the provisions of this [Act]." Unlike the detailed administrative scheme in Section 5, the FTC Act fails to provide for any sanctions for violations of rules promulgated under Section 6 or to otherwise specify that such rules would carry the force of law. This minimal delegation of power arguably conferred the right to issue procedural but not substantive rules.<sup>7</sup>

The FTC has pointed to the 1973 D.C. Circuit Court of Appeals case of *National Petroleum Refiners Association v. FTC*,<sup>8</sup> as support for unfair methods of competition rulemaking, but this reliance is a mistake. Lawyers for TechFreedom, Berin Szóka and Corbin Barthold, explain in their comments to the non-compete rule:

The authors of premier administrative law treatises consider *National Petroleum Refiners* "laughable" by today's standards; Professor Richard J. Pierce calls it "an illustration of something no modern court would do." Professor Gary Lawson calls the case "almost surely incorrectly" decided. "The judges who decided *National Petroleum Refiners*," another treatise notes, "obviously were influenced by their beliefs that the FTC should have the power to issue legislative rules." Khan and Chopra did not engage with these arguments in their 2020 article; neither the NPRM nor the majority's statement does so now.<sup>9</sup>

Parties have already made clear that they will challenge unfair methods of competition rulemaking by the FTC.<sup>10</sup> It would be a mistake for the FTC to continue promulgating rules defining unfair methods of competition when their most recent attempt is controversial and will most likely be struck down in federal court.

<sup>&</sup>lt;sup>7</sup> Maureen K. Ohlhausen and Ben Rossen, "Dead End Road: National Petroleum Refiners Association and FTC 'Unfair Methods of Competition' Rulemaking," Truth on the Market (blog), July 13, 2022, <u>https://truthonthemarket.com/2022/07/13/dead-end-road-national-petroleum-refiners-association-and-ftc-unfairmethods-of-competition-rulemaking/</u>.

<sup>&</sup>lt;sup>8</sup> 482 F.2d 672 (D.C. Cir. 1973).

<sup>&</sup>lt;sup>9</sup> Comments of TechFreedom in the Matter of Non-Compete Clause Rulemaking (April 18, 2023), p. 5, (footnotes omitted), <u>https://techfreedom.org/wp-content/uploads/2023/04/FTC-Non-Competes-TechFreedom-I-Szoka-and-Barthold.pdf</u>.

<sup>&</sup>lt;sup>10</sup> Chelsey Cox, "U.S. Chamber of Commerce Threatens to Sue the FTC over Proposed Ban on Noncompete Clauses," CNBC, January 12, 2023, <u>https://www.cnbc.com/2023/01/12/us-chamber-of-commerce-threatens-to-sue-the-ftc-over-proposed-ban-on-noncompete-clauses.html</u>.

### **III.** The Petition does not warrant consideration by the Commission.

The FTC does have authority to adopt "rules which define with specificity acts or practices which are unfair or deceptive acts or practices in or affecting commerce." However, Petitioners do not ask the FTC to adopt a rule defining unfair or deceptive acts or practices. Even if Petitioners had petitioned for a rule that the FTC had authority to adopt, their Petition would still have to be denied due to its noncompliance with 16 C.F.R. § 1.9, which provides, "Trade regulation rule proceedings may be commenced by the Commission upon its own initiative or pursuant to written petition filed with the Secretary by any interested person stating reasonable grounds therefor." For the reasons that follow, the Petition does not state reasonable grounds for commencing trade regulation proceedings. Further, even if the FTC had the authority to promulgate unfair methods of competition rules, Petitioners fail to show why regulation is needed. The Petitioners' proposals would harm consumers and competition more than they would help.

## A. The Aftermarket for Repairs.

The Petition paints a dim picture of the aftermarket for repairs. Petitioners point to examples from several industries, including personal electronics, small and large appliances, motor vehicles, and farming equipment. Conveniently, Petitioners select the worst examples as illustrative of the entire aftermarket. However, a more holistic view of the aftermarket for repairs paints a different picture.

Petitioners point to (but don't cite) a 2021 nationally representative survey conducted by Consumer Reports finding that "out of 55% of consumers who had a home appliance break down in the last five years, *only* 33% had the appliance repaired successfully and 26% tried to have it repaired but ended up getting a replacement instead, half of whom decided to do so only because repair was too expensive."<sup>11</sup> In other words, only about 7 percent of U.S. consumers tried to repair their broken large home appliance in the past 5 years but replaced it because the repair was too expensive. Assuming that 7 percent is equally distributed year-to-year, that's 1.4 percent annually.

Further, the Consumer Reports survey asked participants if they had <u>ever</u> replaced a broken product sooner than they would have liked because they couldn't find a repair professional to fix it, and only a minority of respondents answered in the affirmative.

<sup>&</sup>lt;sup>11</sup> Petition, p. 12 (emphasis added).

 "Have you ever replaced a broken [product] sooner than you wanted to because you couldn't find a repair professional you were happy with to fix it?"

 "Yes, I have done this."
 Motor Vehicle<sup>12</sup>

 18%

 James Appliance<sup>13</sup>
 33%

 Large Home Appliance<sup>14</sup>
 24%

22%

Smartphone<sup>15</sup>

Petitioners point to a comment by "Gi Gi" that was submitted to the FTC's *Nixing the Fix Call for Empirical Research*. Gi Gi paid \$250 for a new laptop, which was about half of the average selling price for a new laptop.<sup>16</sup> Gi Gi received a good deal. Gi Gi was then quoted \$300 to replace/repair the motherboard. Petitioners don't tell Gi Gi's entire story in their Petition. They stop there. Gi Gi was quoted \$300 by "the geek squad."<sup>17</sup> Gi Gi later took the laptop to a local repair shop and solved the problem for \$45. The FTC is sure to receive some comments on purported 'repair horror stories.' But Gi Gi's isn't one. It's a free market success. Even so, without specific data points on the price of the product, the price of repair, the point of failure, the duration of time between purchase and attempted repair, and the total lifespan of the product, anecdotal comments will be of little use to the Commission.

Petitioners claim that "Repair restrictions also have a significant impact on independent repair shops and their employees."<sup>18</sup> Certain contractual agreements and design choices may create difficulties for repair. However, these choices by manufacturers have purposes outside of repairability, such as brand reputation,<sup>19</sup> intellectual property,<sup>20</sup> and product durability.<sup>21</sup> And the

<sup>&</sup>lt;sup>12</sup> Consumer Reports, *Right to Repair: A Nationally Representative Multi-Mode Survey*, January 2022, p. 9, <u>https://article.images.consumerreports.org/prod/content/dam/surveys/Consumer Reports Right to Repair Survey</u> 2021.

<sup>&</sup>lt;sup>13</sup> Ibid, p. 14.

<sup>&</sup>lt;sup>14</sup> Ibid, p. 19.

<sup>&</sup>lt;sup>15</sup> Ibid, p. 25.

<sup>&</sup>lt;sup>16</sup> Thomas Alsop, "Average Selling Price of Personal Computers (PCs) Worldwide from 2015 to 2019, in Actual and Constant Currency," Statista, July 27, 2022, <u>https://www.statista.com/statistics/722992/worldwide-personal-computers-average-selling-price/</u>.

<sup>&</sup>lt;sup>17</sup> Gi Gi, Comment on Nixing the Fix Call for Empirical Research by the Federal Trade Commission, August 19, 2019, <u>https://www.regulations.gov/comment/FTC-2019-0013-0054</u>.

<sup>&</sup>lt;sup>18</sup> Petition, p. 17.

<sup>&</sup>lt;sup>19</sup> Eric Fruits, "Oregon Should Beware the Right to Repair," Truth on the Market (blog), June 13, 2023, <u>https://truthonthemarket.com/2023/06/13/oregon-should-beware-the-right-to-repair/</u>.

<sup>&</sup>lt;sup>20</sup> Devlin Hartline and Adam Mossoff, *State Right-to-Repair Laws Need to Respect Federal Copyright Laws: A Constitutional, Legal, and Policy Assessment* (Hudson Institute Policy Memo, August 2022), <u>https://www.hudson.org/economics/state-right-to-repair-laws-need-to-respect-federal-copyright-laws-a-constitutional-legal-and-policy-assessment</u>.

<sup>&</sup>lt;sup>21</sup> Mauro Cordella et al., "Durability of Smartphones: A Technical Analysis of Reliability and Repairability Aspects," *Journal of Cleaner Production*, Vol. 286 (March 2021), https://www.sciencedirect.com/science/article/pii/S0959652620354342.

procompetitive effects in the primary market for products outweigh any anticompetitive effects in the secondary market for repairs.

Petitioners state that "phone repair businesses find their income dropping because 'ever-more tempting deals to customers to trade-in their old products for shiny new ones." Petitioners say this like it's a bad thing. But many argue that trade-ins help the environment.<sup>22</sup> And Petitioners discuss the asserted environmental impacts of e-waste at length in their petition.<sup>23</sup> This particular point illustrates the self-interested nature of the Petition. What may be good for repair shops, may not be good for consumers and the environment. For instance, products that seldomly break would be bad for repair shops, but good for consumers and the environment.

Also, consider Fairphone, a Dutch based electronics manufacturer that began selling smartphones in the U.S. last year.<sup>24</sup> Fairphone designs its smartphones for repairability and is the only company to receive a perfect 10 on iFixit's smartphone repairability scores.<sup>25</sup> Fairphones have a lower ingress protection (IP) rating than the most recent iPhones, however, meaning they are less protected against dust and water intrusion.<sup>26</sup> Generally, Fairphones are more repairable than iPhones, but iPhones are more durable than Fairphones.

Petitioners urge the FTC to adopt regulations that would make the iPhone, and every other smartphone, more like the Fairphone. But what appeal would the Fairphone have in the US market? How would the Fairphone differentiate itself? This ultimately harms consumer choice.

In 2022, Fairphone introduced "Fairphone Easy," which adopts a subscription model and is described as the company's "most sustainable and modular phone yet."<sup>27</sup> Fairphone states on its website:

Fairphone Easy encourages subscribers to increase the lifetime of their phone by ensuring they enjoy keeping their phone in use longer. If the subscriber stops, Fairphone ensures the phone 'lives on' by refurbishing it and giving it to a new subscriber, or re-using the parts to repair another phone. At the end of the phone's life, Fairphone will make sure it is properly recycled. This way it won't

https://www.ifixit.com/repairability/smartphone-scores.

<sup>&</sup>lt;sup>22</sup> Joanna Stern, "Why Apple and the Carriers Want Your Old iPhone," *Wall Street Journal*, March 15, 2023, <u>https://www.wsj.com/articles/why-apple-and-the-carriers-want-your-old-iphone-4279cc8d</u>; Stephen Wakeling, "The Environmental and Societal Impact of 1 Million Trade-Ins," Forbes, July 19, 2021, https://www.forbes.com/cites/forbestechcouncil/2021/07/19/the\_environmental and societal impact of 1 million

https://www.forbes.com/sites/forbestechcouncil/2021/07/19/the-environmental-and-societal-impact-of-1-million-trade-ins/.

<sup>&</sup>lt;sup>23</sup> Petition, pp. 15-16.

 <sup>&</sup>lt;sup>24</sup> Jess Weatherbed, "This Environmentally Conscious Smartphone Is Finally Coming to the US," The Verge, July 5, 2023, <u>https://www.theverge.com/2023/7/5/23783714/murena-fairphone-4-us-release-date-price-sustainability-repair</u>.
 <sup>25</sup> "Smartphone Repairability Scores," iFixit, accessed February 1, 2024,

<sup>&</sup>lt;sup>26</sup> The Fairphone 4 has an IP rating of 54, and the Fairphone 5 has an IP rating of 55. "IP Rating," Fairphone, accessed February 2, 2024, <u>https://support.fairphone.com/hc/en-us/articles/10377554840593-IP-Rating</u>. iPhone models 11 through 15 have an IP rating of 68. "About Splash, Water, and Dust Resistance of iPhone 7 and Later," Apple, January 10, 2024, <u>https://support.apple.com/en-us/108039</u>.

<sup>&</sup>lt;sup>27</sup> Ronald van Harten, "Fairphone Easy: a Smartphone Subscription for a Fairer Future," Fairphone, June 15, 2022, <u>https://www.fairphone.com/en/2022/06/15/fairphone-easy-a-smartphone-subscription-for-a-fairer-future/</u>.

become e-waste, or end up in a drawer where its valuable materials cannot be utilized.  $^{\rm 28}$ 

iFixit has praised Fairphone's designs, but has said, "we're not big fans of the move toward hardware subscriptions."<sup>29</sup>

Petitioners' negative stance towards trade-ins and subscriptions raises questions as to whether they have sincere concerns for consumers and the environment.

Petitioners also assert, without support, that "repair markets have tended toward consolidation."<sup>30</sup> According to a report by IBISWorld, the aftermarket for cell phone repair is "highly fragmented and small localized enterprises dominate the industry."<sup>31</sup> IBISWorld found that the top four companies generate less than 40 percent of industry revenue. Further, in 2023, the top four players account for less than 10 percent of industry revenue. The 2021 Consumer Reports survey found that consumers select a variety of locations for phone repair:

Smartphone Repair Location Chosen:	Percentage of
	<b>Respondents:</b> <sup>32</sup>
Store where the phone was purchased	33
Manufacturer	23
Authorized or certified repair shop	23
Independent repair shop	21
Repair service like Best Buy's Geek Squad or uBreakiFix	19
Self-repair; or repair by friend or family member	12
Chain retailer	10

For electronic and computer repair, IBISWorld similarly concluded that market concentration was low.<sup>33</sup> And the same goes for appliance repair.<sup>34</sup> A 2022 Statista survey found that only 13 percent of US households owned a major smart appliance, and only 13 percent owned a small smart appliance.<sup>35</sup> The 2021 Consumer Reports survey likewise found that consumers had their appliance repaired outside of manufacturers' networks more often than not:

<sup>&</sup>lt;sup>28</sup> Ibid.

<sup>&</sup>lt;sup>29</sup> Elizabeth Chamberlain, "If You Don't Own It, You Can't Fix it," iFixit, June 23, 2022, https://www.ifixit.com/News/61674/if-you-dont-own-it-you-cant-fix-it.

<sup>&</sup>lt;sup>30</sup> Petition, p. 19.

<sup>&</sup>lt;sup>31</sup> "Cell Phone Repair in the US – Market Size, Industry Analysis, Trends and Forecasts (2024-2029), IBISWorld, May 2023, <u>https://www.ibisworld.com/united-states/market-research-reports/cell-phone-repair-industry/#IndustryStatisticsAndTrends</u>.

<sup>&</sup>lt;sup>32</sup> Consumer Reports, *Right to Repair Survey*, p. 21.

<sup>&</sup>lt;sup>33</sup> "Electronic & Computer Repair Services in the US - Market Size, Industry Analysis, Trends and Forecasts (2024-2029)," IBISWorld, June 2022, <u>https://www.ibisworld.com/united-states/market-research-reports/electronic-computer-repair-services-industry/#IndustryStatisticsAndTrends</u>.

<sup>&</sup>lt;sup>34</sup> "Appliance Repair in the US - Market Size, Industry Analysis, Trends and Forecast (2024-2029)," IBISWorld, April 2023, <u>https://www.ibisworld.com/united-states/market-research-reports/appliance-repair-industry/#IndustryStatisticsAndTrends</u>.

<sup>&</sup>lt;sup>35</sup> Statista Research Department, "Ownership Rate of Smart Appliances in the United States in 2022\*," Statista, August 3, 2022, <u>https://www.statista.com/statistics/1124257/smart-appliances-ownership-us-2020/</u>.

Repair Location	Percentage of Respondents	
	Small Appliances <sup>36</sup>	Large Appliances <sup>37</sup>
Self-repair; or repair by friend or family	52	39
member		
Store where the appliance was purchased	24	13
Manufacturer	21	9
Independent repair shop	21	30
Authorized or certified repair shop	17	29
Chain retailer	4	5

When it comes to motor vehicles, non-dealership services still dominate the market. And dealerships' percentage of service is trending downward. A recent survey published by Cox Automotive in December 2023 found dealerships accounted for only 30 percent of service visits, down from 35 percent in 2021.<sup>38</sup> The Cox Automotive report also found that average dealership prices (\$258 per visit) are on par with non-dealership prices (\$249 per visit).<sup>39</sup>

When it comes to agricultural equipment, a survey conducted by the North American Equipment Dealers Association (NAEDA) found that "[f]ifty-six percent of dealer parts are sold out the door and are not installed by the dealership."<sup>40</sup> And dealerships sell parts and tools to nine independent repair shops on average.<sup>41</sup>

## B. Repairability Scores.

Petitioners propose a national U.S. repairability scoring system that would compel manufacturers to include repairability "scoring on labels at the point of sale."<sup>42</sup> However, repairability scores would likely be unconstitutional compelled commercial speech. And mandated repairability scores would be both unnecessary and misleading.

1. Repairability scores would be unconstitutional.

Under *Zauderer v. Office of Disciplinary Counsel*, compelled commercial speech must be "purely factual and uncontroversial."<sup>43</sup> Some argue that repair scores "stand on solid constitutional footing" and that they are "no less factual than the EPA miles-per-gallon

 $\frac{https://files.constantcontact.com/3948c68b001/7fc3c0ae-5f87-4291-a358-e0e2bd19e227.pdf?rdr=true.^{41}$ Ibid.

<sup>&</sup>lt;sup>36</sup> Consumer Reports, *Right to Repair Survey*, p. 11.

<sup>&</sup>lt;sup>37</sup> Ibid, p. 16.

<sup>&</sup>lt;sup>38</sup> Cox Automotive, Under the Hood: Opportunities and Challenges in the Service Industry, December 2023, pp. 8-

<sup>9, &</sup>lt;u>https://www.coxautoinc.com/wp-content/uploads/2023/12/2023-Cox-Automotive-Service-Study-Summary.pdf</u>. <sup>39</sup> Ibid, p. 14.

<sup>&</sup>lt;sup>40</sup> "Repair Done Right," North American Equipment Dealers Association, 2022,

<sup>&</sup>lt;sup>42</sup> Petition, p. 36.

<sup>&</sup>lt;sup>43</sup> 471 U.S. 626, 651 (1985).

disclosure,"<sup>44</sup> and likewise make this point in their comments to this petition for rulemaking.<sup>45</sup> But this is folly.

Petitioners propose that

An effective repairability score should take into account, at a minimum, (1) the ease of disassembly for purposes of repair, (2) the availability of repair manuals, (3) the availability of spare parts, (4) whether software contains unnecessary obstacles like digital locks, and (5) the expected end of life of the product, including how long the product will receive software updates, defect support and warranty periods, and service material availability.<sup>46</sup>

All of these factors would be used to compute one, single number from one to ten. Calculating miles-per-gallon is objective. It communicates how many miles one can travel on one gallon of gasoline. In contrast, the repairability scoring that the Petitioners propose would involve subjective weighing of several factors. This is far from the type of purely factual information required under *Zauderer*. Further, factoring the "ease" of disassembly and whether software is "unnecessary" is likewise subjective. Whatever repairability score derived would also be misleading for the reasons explained in Part III.B.3 of this comment.

2. Repairability score rule would be unnecessary.

A rule requiring repairability score labeling would be unnecessary, as information on product repairability is readily available online. Resources providing repairability scoring, grades, information already exist and are readily accessible without arduous research. Both Petitioners provide resources on repairability of electronics, and are among the first results when searching for "repairability scores" on Google.

Petitioner iFixit's repairability scores are perhaps the most well-known source for information on repairability. It publishes "Smartphone Repairability Scores" that provide repairability scoring from one to ten on over 140 different smartphone models released since 2007.<sup>47</sup> Further, iFixit publishes "Laptop Repairability Scores" that provide scores on nearly 50 laptops released since 2010.

<sup>&</sup>lt;sup>44</sup> Aaron Perzanowski, "Mandating Repair Scores," *Berkeley Technology Law Journal*, Vol. 37, No. 3 (2022), pp. 1138-1139, <u>https://btlj.org/wp-content/uploads/2023/06/0005-37-3-Perzanowski.pdf</u>.

 <sup>&</sup>lt;sup>45</sup> Comments from Aaron Perzanowski et al. on the Petition for Rulemaking of PIRG and iFixit, FTC-2023-0077-1592, February 2, 2024, <u>https://www.regulations.gov/comment/FTC-2023-0077-1592</u>.
 <sup>46</sup> Petition, p. 37.

<sup>&</sup>lt;sup>47</sup> "Smartphone Repairability Scores," iFixit, accessed January 18, 2024, <u>https://www.ifixit.com/repairability/smartphone-scores</u>.

Petitioner U.S. PIRG likewise provides repairability information and scores that are easily accessible online. U.S. PIRG releases an annual report entitled *Failing the Fix: Grading Laptop and Cell Phone Companies on the Fixability of their Products.*<sup>48</sup>

3. Repairability scores would be neither accurate nor useful in light of changing software and supply chains.

Repairability score labeling would not benefit consumers, because scoring would likely become out of date between initial labeling and the purchase point. This rapidly changing nature of technology markets was explained in the Comments of the Consumer Technology Association to the Energy Labeling Rule:

> [T]elevision models constantly evolve and improve, so attempts to estimate ranges for TVs are futile because the data becomes quickly outdated almost as soon as it is set. The pace of product innovation and improvement in the market for televisions is especially rapid, and product models and feature sets change quickly. In this dynamic product market, the validity and relevancy of product comparisons among television models in any given moment is relatively brief, making the range of comparability unreliable and misleading. Consumers do not benefit from a range of comparability disclosure if the end points on the comparability scale are outdated and irrelevant.<sup>49</sup>

The same can be said about other consumer electronics.

a. Software can make repairability increase or decrease after initial labeling.

Petitioners argue that an effective repairability score would consider "whether software contains unnecessary obstacles like digital locks." Because consumer electronics like smartphones and personal computers routinely receive software updates, any repairability score given at the time of packaging could decrease or increase after purchase.

For example, last year, iFixit retroactively lowered the repairability score of the iPhone 14. Initially, in September 2022, iFixit gave Apple's iPhone 14 a repairability score of 7 out of 10.

<sup>48</sup> Lucas Rockett Gutterman, *Failing the Fix: Grading Laptop and Cell Phone Companies on the Fixability of their Products* (U.S. PIRG Education Fund, February 2023), <u>https://publicinterestnetwork.org/wp-</u>

<u>content/uploads/2023/02/2023-Failing-the-Fix-PIRG.pdf</u>; Nathan Proctor, Failing the Fix: Grading Laptop and Cell Phone Companies on the Fixability of their Products (U.S. PIRG Education Fund, February 2022), <u>https://publicinterestnetwork.org/wp-content/uploads/2022/07/Failing20the20Fix\_USPEF\_March2022.pdf</u>.

<sup>&</sup>lt;sup>49</sup> Comments of the Consumer Technology Association on the Energy Labeling Rule ANPR before the Federal Trade Commission, Docket No. FTC-2022-0061, pp. 2-3, <u>https://www.regulations.gov/comment/FTC-2022-0061-0038</u>.

iFixit praised the company stating that "Apple has completely redesigned the internal of the iPhone 14 to make it easier to repair."<sup>50</sup>

However, one year later in September 2023, iFixit lowered the iPhone's repairability score to a 4 out of 10. In a blog post, iFixit founder Kyle Wiens said, "we've gone back to the drawing board with our scoring system to make sure that if reflects this significant new software limitation on repairs."<sup>51</sup> Further, Wiens said that "Apple could fix this problem with a software update, and that 7 / 10 score could return overnight."<sup>52</sup>

This example illustrates that mandated repairability scores at the point of sale would lead to continuous inaccuracy and likely increased confusion among consumers.

b. Supply chain shortages or improvements can change after initial labeling.

Additionally, Petitioners argue that an effective repairability score should consider "the availability of spare parts." This factor could also change dramatically after the initial repairability labeling for a product for reasons outside of the manufacturer's control, such as natural disasters.<sup>53</sup>

The effects of natural disasters on supply chain shortages is well documented.<sup>54</sup> For example, the 2011 earthquakes in Japan created shortages for various industries.

The literature on the Japan earthquake shows that the immediate effects were highly disruptive because there were few substitutes for Japanese suppliers. Boehm et al. (2019) find that Japanese multinationals in the US lost access to intermediate inputs and experienced severe reductions in production as a result. A shortage of over 100 parts left Toyota's North American operations operating at 30% capacity for several weeks (Canis 2011).<sup>55</sup>

Also, in 2011, Thailand incurred disastrous flooding that plagued supply chains worldwide.

Thailand is a major supplier in the global supply chain, particularly in the auto and electronic sectors. Therefore, downstream partners in the supply chain were adversely affected by the disaster as they

<sup>&</sup>lt;sup>50</sup> Kyle Wiens, "Inside Apple's Secret iPhone Redesign: What If We Told You this is the iPhone 14 You Should Buy?," iFixit, September 16, 2022, <u>https://www.ifixit.com/News/64865/iphone-14-teardown</u>.

 <sup>&</sup>lt;sup>51</sup> Kyle Wiens, "We are Retroactively Dropping the iPhone's Repairability Score," iFixit, September 19, 2023, <a href="https://www.ifixit.com/News/82493/we-are-retroactively-dropping-the-iphones-repairability-score-en">https://www.ifixit.com/News/82493/we-are-retroactively-dropping-the-iphones-repairability-score-en</a>.
 <sup>52</sup> Ibid.

<sup>&</sup>lt;sup>53</sup> Ye Linghe and Abe Masato, "The Impacts of Natural Disasters on Global Supply Chains," ARTNeT Working Paper Series No. 115 (2012), <u>https://www.econstor.eu/bitstream/10419/64267/1/717874087.pdf</u>.

<sup>&</sup>lt;sup>54</sup> Michele Ruta, Aaditya Mattoo, and Alen Mulabdic, "How Natural Disasters Reshape Supply Chains: Lessons for the COVID-19 Crisis," Vox<sup>EU</sup> CEPR, August 18, 2021, <u>https://cepr.org/voxeu/columns/how-natural-disasters-reshape-supply-chains-lessons-covid-19-crisis</u>.

were unable to source parts and components from Thailand during the flood.  $^{\rm 56}$ 

The floods in Thailand had a particular negative effect on hard drives for personal computers. At the time, about 40 percent of hard drive production occurred in Thailand.<sup>57</sup>

Supply chain shortages can be caused by events other than natural disasters, such as pandemics,<sup>58</sup> armed conflicts,<sup>59</sup> and unexpected demand surges.<sup>60</sup> These can likewise affect repairability scores after initial labeling, rendering the score useless and confusing.

## C. Exclusive Contracts.

# 1. Exclusive Vendor Agreements

Petitioners urge the FTC to prohibit manufacturers from requiring independent repair shops to buy parts from exclusive vendors. They state, "[m]anufacturers should be barred from, for instance, requiring that independent repair shops buy parts from preapproved exclusive vendors."

However, as even the FTC acknowledged in *Nixing the Fix: An FTC Report to Congress on Repair Restrictions*, "courts have viewed certain aftermarket practices as being product improvements." Both the *Nixing the Fix* report and the Petitioners cite *Queen City Pizza, Inc. v. Domino's Pizza, Inc.*, which observed that Domino's requirement to purchase certain ingredients "is crafted so as to maintain uniformity and consistency of quality throughout the network."<sup>61</sup>

Petitioners view these exclusive vendor agreements as "self-serving."<sup>62</sup> However, these agreements help promote repairs that ensure longevity of products, something Petitioners claim to desire.

# 2. Exclusive Contracts with Component Suppliers.

Petitioners propose a blanket ban on manufacturers' use of exclusive contracts with component suppliers. The Petition states: "manufacturers should be barred from using exclusive contracts with their component suppliers, such that those suppliers are contractually barred from selling components or parts, especially microchips, to independent repair providers."

<sup>57</sup> Larry Dignan, "Thailand Floods to Lead to Hard Drive Shortages for Months," ZDNet, October 23, 2011, <u>https://www.zdnet.com/article/thailand-floods-to-lead-to-hard-drive-shortages-for-months/</u>.

<sup>&</sup>lt;sup>56</sup> Linghe and Masato, "The Impacts of Natural Disasters," p. 11.

<sup>&</sup>lt;sup>58</sup> Willy C. Shih, "Global Supply Chains in a Post-Pandemic World," *Harvard Business Review* (September-October 2020), <u>https://hbr.org/2020/09/global-supply-chains-in-a-post-pandemic-world</u>.

<sup>&</sup>lt;sup>59</sup> Kenneth Rogoff, "The Long-Lasting Economic Shock of War," International Monetary Fund, accessed January 28, 2024, <u>https://www.imf.org/en/Publications/fandd/issues/2022/03/the-long-lasting-economic-shock-of-war</u>.

<sup>&</sup>lt;sup>60</sup> Lu Huang, Jing-Sheng Song, and Jordan Tong, "Supply Chain Planning for Random Demand Surges: Reactive Capacity and Safety Stock," *Manufacturing & Service Operations Management*, Vol. 18, No. 4 (August 2016), https://pubsonline.informs.org/doi/abs/10.1287/msom.2016.0583.

<sup>&</sup>lt;sup>61</sup> 922 F. Supp. 1055, 1058 (3d Cir. 1997).

<sup>&</sup>lt;sup>62</sup> Petition, p. 37.

However, even as the FTC acknowledges, "[e]xclusive contracts can benefit competition in the market by ensuring supply sources or sales outlets, reducing contracting costs, or creating dealer loyalty."<sup>63</sup>

Manufacturers, particularly those in tech and digital products, often navigate a complicated web of global supply chains. For example, Apple contracted with as many as 200 suppliers in 30 different countries to assemble its iPhone 13.<sup>64</sup> Exclusive contracts with vendors and overseas vendors enable manufactures to create consistent, dependable, and cost-efficient relationships with supply sources.

## D. Minimum Standards for Support and Documentation

Petitioners point to expiration dates on gallons of milk as a parallel to support and documentation for repair.<sup>65</sup> However, according to the U.S. Department of Agriculture, "there is no federal requirement that food be labeled with a date."<sup>66</sup>

It's unclear what exactly the Petitioners are requesting when they ask for "Minimum Standards for Support and Documentation." This confusion would have been cleared up if the text of the requested rule was included in the Petition. They suggest:

When a company manufactures a device over a certain cost threshold, it should be required to produce some minimum level of service documentation. Those would include a wiring diagram and circuit board schematic, as well as a parts inventory. . . . Requiring that manufacturers support repair and provide documentation for a period after purchase would allow consumers to repair devices themselves or utilize independent repair shops.<sup>67</sup>

Petitioners do not provide the "cost threshold" they have in mind, neither do they provide the exact time period for which manufacturers would have to provide support and documentation.

<sup>&</sup>lt;sup>63</sup> "Exclusive Supply or Purchase Agreements," Federal Trade Commission, accessed January 30, 2024, <u>https://www.ftc.gov/advice-guidance/competition-guidance/guide-antitrust-laws/single-firm-conduct/exclusive-supply-or-purchase-agreements</u>.

<sup>&</sup>lt;sup>64</sup> Scott Lincicome and Alfredo Carrillo Obregon, "The Case for Free Trade Remains Inside Your Pocket," Cato at Liberty (blog), Cato Institute, September 9, 2022, <u>https://www.cato.org/blog/case-free-trade-remains-inside-pocket</u>.

<sup>&</sup>lt;sup>65</sup> "When a consumer buys a gallon of milk, the label states clearly when the milk is likely to go bad. However, when a consumer buys a device which connects to the internet and needs periodic updates for compatibility and security, there is no requirement that the manufacturer offers a minimum software service window for that device." Petition, p. 39.

<sup>&</sup>lt;sup>66</sup> "Is Food Product Dating Required by Federal Law," AskUSDA, U.S. Department of Agriculture, March 8, 2023, <u>https://ask.usda.gov/s/article/Is-food-product-dating-required-by-federal-law</u>.

<sup>&</sup>lt;sup>67</sup> Petition, pp. 40-41.

Forcing manufacturers to maintain part inventories for products would likely be expensive, and the increased costs incurred would be passed onto consumers in the form of higher prices.<sup>68</sup> Repair markets cannot be viewed myopically. It must be viewed in light of the primary market for those products. As the majority opinion in *Eastman Kodak Co. v. Image Technical Services Inc.* acknowledged in its final paragraph,

In the end, of course, Kodak's arguments may prove to be correct. It may be that its parts, service, and equipment are components of *one unified market*, or that the equipment market does discipline the aftermarkets so that all three are priced competitively overall, or that the anticompetitive effects of Kodak's behavior are outweighed by its competitive effects.<sup>69</sup>

Contrary to Petitioners' arguments, courts have been correct in limiting *Kodak*. *Kodak*'s holding was primarily procedural, determining summary judgment after truncated discovery was inappropriate in this case. Recent economic research supports the idea of this "unified market" theory to which the Court alluded. An article published in the *Management Science* journal concluded that "right to repair" proposals such as those made by the Petitioners could lead to a "lose-lose-lose" situation in which consumers, manufacturers, and the environment are worse off.<sup>70</sup> The authors write, "if one looks at the repair market alone, it is tempting to conclude that consumers are better off, but this reasoning fails to account for the higher product prices consumers have to pay up front."<sup>71</sup>

When it comes to service documentation, many manufacturers already make these products available. The Consumer Technology Association identified several manufacturers that provide such documentation in their comments on the FTC's Energy Labeling Rule.<sup>72</sup> Further, Ike Brannon and Kerri Seyfert explain the many manufacturers have expanded access to this type of information:

Both Case IH and New Holland Agriculture have pages on their website dedicated to repair access, complete with resources for finding electronic service tools, manuals, parts and other materials needed for servicing equipment. Beyond agricultural equipment, electronic device manufacturers such as Samsung and Apple have also expanded repair access for their customers, providing kits for a variety of different repairs and allowing access to the parts, tools and documentation that already exist for their established repair

<sup>&</sup>lt;sup>68</sup> Luyi Yang, Chen Jin, and Cungen Zhu, "Research: The Unintended Consequences of Right-to-Repair Laws," *Harvard Business Review*, January 19, 2023, <u>https://hbr.org/2023/01/research-the-unintended-consequences-of-right-to-repair-laws</u>.

 <sup>&</sup>lt;sup>69</sup> Eastman Kodak Co. v. Image Technical Services, Inc., 504 U.S. 451, 486 (1992) (emphasis added).
 <sup>70</sup> Chen Jin, Luyi Yang, and Cungen Zhu, "Right to Repair: Pricing, Welfare, and Environmental Implications," *Management Science*, Vol. 69, No. 2 (February 2023), p.1019,

https://pubsonline.informs.org/doi/pdf/10.1287/mnsc.2022.4401. <sup>71</sup> Ibid, p. 1028.

<sup>&</sup>lt;sup>72</sup> Comments of the Consumer Technology Association, p. 6.

and logistical models. Other OEMs that do not have an established in-house or third-party repair program provide remote diagnostic services, backed by quick replacement at the part's actual cost.<sup>73</sup>

And, as the Petitioners point out, some independent providers compile or compose repair manuals.<sup>74</sup> One of the Petitioners, iFixit, likewise creates these manuals that are available on their website.<sup>75</sup>

Some experts have also raised concern that forced distribution of repair documentation could violate intellectual property rights. In their *Fordham Law Review* article "Intellectual Property Law and the Right to Repair," Leah Chan Grinvald and Ofer Tur-Sinai point out that "requiring manufacturers to release repair manuals could implicate a whole host of intellectual property laws, including trade secrets."<sup>76</sup>

## E. Design Features.

1. Part pairing

Part pairing can enable manufacturers to track common points of failure and to improve on products designs in the future. It also allows consistency by ensuring that parts supplied by overseas vendors continue to be of high quality. According to Alabama based repair shop, XiRepair,

From many OEM's perspectives including Apple, it's important for them to retain the data on how often a device's part is replaced. Such information is helpful in weeding out inferior parts suppliers and identifying failure points in their product's individual components. Today's smart gadgets are made up of components from hundreds, if not thousands of suppliers from across the globe. In a globalized economy, it's vital for OEMs to possess the data surrounding changes to individual components . . . .<sup>77</sup>

While a prohibition on "part pairing" may make a device more repairable in theory, it may also make devices more breakable in the long run by inhibiting manufacturers' ability to improve on their products' longevity.

<sup>&</sup>lt;sup>73</sup> Ike Brannon and Kerri Seyfert, *The Economic Downsides of "Right-to-Repair"* (National Association of Manufacturers, December 2023) (footnotes omitted), p. 5, <u>https://documents.nam.org/COMM/NAM-3740-Right%20to%20Repair%20Paper%20R4%20V1%20FIN.pdf</u>.

<sup>&</sup>lt;sup>74</sup> Petition, pp. 40-41.

<sup>&</sup>lt;sup>75</sup> "Repair Guides," iFixit, accessed January 29, 2024, <u>https://www.ifixit.com/Guide</u>.

<sup>&</sup>lt;sup>76</sup> Leah Chan Grinvald and Ofer Tur-Sinai, "Intellectual Property Law and Right to Repair," *Fordham Law Review*, Vol. 88, No. 1 (2019), p. 63, <u>https://ir.lawnet.fordham.edu/cgi/viewcontent.cgi?article=5618&context=flr</u>.

<sup>&</sup>lt;sup>77</sup> "So What Is Part Pairing on Electronics?," XiRepair, accessed January 22, 2024, <u>https://www.xirepair.com/how-does-part-pairing-work-on-apple-devices/</u>.

## 2. Use of Glue and Adhesives

Petitioners suggest the possibility of a rule that might prohibit glued-in batteries. This would likewise have the effect of making devices less durable and more breakable. The petition uses the term "glue" and not "adhesive." It is unclear if Petitioners intend to distinguish the two, or if there is even a worthy distinction to be made. The Family Handyman says, "Glues are derived from natural sources (plant and animal byproducts), while adhesives are synthetic. But in everyday usage, the words are practically synonymous."<sup>78</sup>

If the Petitioners had included the text of the rule, as required by 16 C.F.R. § 1.31, we would be better able to respond. But they have not.

One of the petitioners, iFixit, has acknowledged in the past that "glue does a great job at keeping your device in one piece."<sup>79</sup> However, despite this, Petitioners suggest that its use be prohibited for the sake of repairability. Manufacturers should be free to emphasize durability or repairability in their product designs.

The use of glue and adhesives often operate as sealants as consumer demand for more waterresistant devices grows.<sup>80</sup> While it may be true that sealants create complexities for repair, the designs function to "resist the intrusion of dust and water into the internal electronics."<sup>81</sup> Scientific journals discuss the trade-offs between repairability and reliability:

Both reliability and repairability seem to be appealing characteristics for consumers, although there might be a slight consumer preference for reliability. Furthermore, both strategies can yield environmental benefits. Benefits could be potentially higher for more reliable smartphones, where impacts associated with the repair or replacement of the device are avoided, or at least delayed.<sup>82</sup>

Further, glue and adhesives have design functions beyond just keeping a device together. According to TrumonyTechs, a research and development group at Shanghai Jiao Tong University focusing on green technologies in electric vehicles and heat transfer, the use of thermal conducting adhesives has promising applications for consumer technology:

> In smartphones, for example, as the main frequency of the smartphone chip is getting higher and higher and the heat generated, not only affects the customer's feeling of use, but also

<sup>79</sup> Lauren Greenlee, "Why Electronics Rely on Glue—and Why They Shouldn't," iFixit, August 10, 2022, https://www.ifixit.com/News/63249/why-electronics-rely-on-glue.

<sup>&</sup>lt;sup>78</sup> Chris Deziel, "A DIYer's Guide to Glue," Family Handyman, February 16, 2023, <u>https://www.familyhandyman.com/list/glue-types-uses-superglue-rubber-cement-epoxy-wood/</u>.

<sup>&</sup>lt;sup>80</sup> Quanqing Yu et al., "Water-Resistant Smartphone Technologies," *IEEE Access*, Vol. 7 (April 13, 2019), p. 42757, <u>https://ieeexplore.ieee.org/stamp/stamp.jsp?arnumber=8671469</u>.

<sup>&</sup>lt;sup>81</sup> Dylan A. Hazelwood and Michael G. Pecht, "Life Extension of Electronic Products: A Case Study of Smartphones," *IEEE Access*, Vol. 9 (October 21, 2021), p. 144726, https://ieeexplore.ieee.org/stamp.jsp?arnumber=9583257.

<sup>&</sup>lt;sup>82</sup> Cordella et al., "Durability of Smartphones," p. 2.

damages the cell phone hardware. 2019 onwards, cell phone heat dissipation has become the new focus of the market  $\dots$ <sup>83</sup>

Specifically, TrumonyTechs points to "thermal conductive potting adhesive," which is

epoxy resin and filled thermally conductive powder as the main material, supplemented by hardener and accelerator, with very good thermal conductivity, high temperature stability and mechanical strength, with the function of thermal conductivity, potting, sealing and fixing.<sup>84</sup>

Thermal conducting adhesives and glue<sup>85</sup> can help regulate device temperature, and "Consistent high temperatures can lead to permanent damage to your device."<sup>86</sup>

Scientific journals also explore the use of thermal conducting adhesives in smartphones. An article published in the journal *Molecules* studied the use of "biomimetic liquid metal—elastomer composited foam with adjustable thermal conductivity" (B-LM-ECF). The authors found that

When the material is applied to smartphones, it can dissipate heat for high-temperature phones in high thermal conductivity state, and can adaptively switch itself to low thermal conductivity state for heat dissipation under low-temperature environment. The above experiments suggest that the proposed B-LM-ECF exhibits excellent thermal management capability in diverse typical thermal management situations, and has great application prospects in niche markets in the field of heat control.<sup>87</sup>

Manufacturers should be free to use these new innovations in product design to further the lifespan of devices. By prohibiting the use of either glues or adhesives, more devices will be damaged by drops and manufacturers will be foreclosed from using new innovative designs that utilize thermally conductive properties. That means more broken stuff.

 <sup>&</sup>lt;sup>83</sup> "Best Materials for Dissipating Heat in Electronics," TrumonyTechs, accessed January 30, 2024, <a href="https://www.trumonytechs.com/best-materials-for-dissipating-heat-in-electronics/">https://www.trumonytechs.com/best-materials-for-dissipating-heat-in-electronics/</a>.
 <sup>84</sup> Ibid.

<sup>&</sup>lt;sup>85</sup> "GENNEL G109 10gram Thermal Conductive Glue, Silicone Glue, Thermal Plaster, Silicone Viscous Adhesive Compound, Heatsink Glue for LED GPU MOSFET Printer Chipset IC High Performance," Amazon, accessed February 1, 2024, <u>https://www.amazon.com/GENNEL-Conductive-Silicone-Adhesive-</u> Compound/dp/B072MSXHJD.

<sup>&</sup>lt;sup>86</sup> "Hot, Hot, Hot!," Electrical and Computer Engineering, Carnegie Mellon University, June 29, 2021, <u>https://www.ece.cmu.edu/news-and-events/story/2021/06/hot-electronics.html</u>.

<sup>&</sup>lt;sup>87</sup> Hongyao Tang et al., "Biomimetic Liquid Metal-Elastomer Composited Foam with Adjustable Thermal Conductivity for Heat Control," *Molecules*, Vol. 28, No. 4 (February 2023), p. 3, <u>https://www.mdpi.com/1420-3049/28/4/1688</u>.

## 3. Soldered-in Parts

Petitioners also suggest that a rule might prohibit soldered-in batteries and that soldering is generally a problem in product design. But, again, soldering has a number of benefits and does not solely occur to hinder repair. Soldering allows for slimmer designs, easy assembly, and fewer points of failure.<sup>88</sup>

According to research from McKinsey & Company, smaller can be better. And soldering allows for smaller and slimmer product design. Slimmer designs allow for better shelf holding power and freight shipping savings, which can lower prices for consumers. Slimmer designs are also important for sustainability, according to McKinsey & Company. They identify three distinct benefits: (1) "CO2 emissions reduction (from freight)"; (2) "Lower packaging [Cost of goods sold] (less material usage, less packaging waste)"; and (3) "In some cases (such as origami redesigns), there is often less damage = less product waste due to returns of defective goods."<sup>89</sup>

## F. Petitioners use inappropriate supporting data under 16 CFR § 1.31(c).

The Petition relies on an original research report entitled "Repair Saves Families Big" in asserting purported benefits of potential right to repair rulemaking.<sup>90</sup> The report was produced by one of the Petitioners, US PIRG.<sup>91</sup>

Under 16 C.F.R. § 1.31(c), the FTC requires that "[i]f an original research report is used to support a petition, the information should be presented in a form that would be acceptable for publication in a peer reviewed scientific or technical journal." Additionally, "[i]f quantitative data are used to support a petition, the presentation of the data should include a complete statistical analysis using conventional statistical methods." Neither the petition nor the original report produced by US PIRG abide by 16 CFR § 1.31(c).

Relying the on US PIRG Report, petitioners assert:

In 2021, Petitioner PIRG found that American households spent around \$1,767 on new electronic products, \$287 more than in 2019, coming out to an alarming 19% increase in spending in two years. Repairing products could reduce spending by 21.6%, approximately \$382 per year per household. Across 129 million households in the U.S., this would save households \$49.6 billion per year.<sup>92</sup>

<sup>&</sup>lt;sup>88</sup> Elliot Nesbo, "Why Some Laptop Parts Are Soldered Instead of Being Replaceable," Make Use Of, November 12, 2022, <u>https://www.makeuseof.com/why-laptop-parts-soldered-instead-of-replaceable/</u>.

 <sup>&</sup>lt;sup>89</sup> Dave Fedewa et al., "Skinny Design: Smaller Is Better," McKinsey & Company, April 26, 2022, <u>https://www.mckinsey.com/capabilities/operations/our-insights/skinny-design-smaller-is-better</u>.
 <sup>90</sup> Petition, pp. 11-12.

<sup>&</sup>lt;sup>91</sup> Nathan Proctor, *Repair Saves Families Big: Americans Are Churning Through Electronics, and It's Not Cheap* (U.S. PIRG Education Fund, April 2023), <u>https://publicinterestnetwork.org/wp-content/uploads/2023/04/Repair-Saves-Families-Big\_USPEF\_APR23.docx-1.pdf</u>.

<sup>&</sup>lt;sup>92</sup> Petition, pp. 11-12.

The petition fails to provide this information in a form that would be acceptable in a peerreviewed journal, and it fails to provide any statistical analysis using any statistical method. Further, even when viewing the US PIRG Report in its entirety, it fails to abide by 16 C.F.R. § 1.31(c).

US PIRG, in its report, "located the average cost to replace or repair these four product types": smartphones; laptops; refrigerators; and washing machines.<sup>93</sup> But the US PIRG report fails to identify or list the figures used in its calculations.<sup>94</sup>

The report is also methodologically flawed and should not be used to inform rulemaking or any form of government action.

The baseline of \$1,767 is emphatically incorrect, because US PIRG included non-electric "miscellaneous housewares" in its total spending on small appliances. The report claims that "households spent an average of \$142 on small appliances in 2021."<sup>95</sup> US PIRG relied on the Bureau of Labor Statistics (BLS) Consumer Expenditure Surveys for the \$142 figure, which reported that the average U.S. household spent \$142.01 on "Small appliances and miscellaneous housewares" in 2021.<sup>96</sup>

Unlike its BLS source, the US PIRG report fails to distinguish between "Small appliances" and "miscellaneous housewares."<sup>97</sup> According to the BLS, the average household spent \$83 on housewares, which includes (1) flatware; (2) dinnerware, glassware, and serving pieces; (3) nonelectric cookware; and (4) tableware and nonelectric kitchenware. None of these products would fall under right to repair measures. Actual spending on "small appliances," according to the BLS, was \$59.01.

Product Category	Claimed Average Household	Corrected Average Household
	Spending (2021)	Spending (2021)
Major appliances	\$464	\$463.52
Small appliances	\$142	\$59.01
Consumer electronics	\$1,161.25	\$1,161.25
Total:	\$1,767.25	\$1,683.78

Additionally, the US PIRG report does not consider any small appliances when comparing the cost to replace versus the cost of repair. It only considers two large appliances and two personal electronic devices.<sup>98</sup>

<sup>&</sup>lt;sup>93</sup> Proctor, *Repair Saves Families Big*, p. 6 (footnotes omitted).

<sup>&</sup>lt;sup>94</sup> The US PIRG report provides a series of eight footnotes citing sources from Statista, HomeAdvisor, Kitchens.com, and Yelp. But the report does not list or identify the figures used in its calculations. Ibid. <sup>95</sup> Ibid, p. 6.

 <sup>&</sup>lt;sup>96</sup> US PIRG used Table 1203 of the Consumer Expenditure Surveys: <u>https://www.bls.gov/cex/tables/calendar-year/mean-item-share-average-standard-error/cu-income-before-taxes-2021.pdf</u>.
 <sup>97</sup> A more detailed illustration is provided in Table R-1 of the Consumer Expenditure Surveys:

<sup>&</sup>lt;sup>97</sup> A more detailed illustration is provided in Table R-1 of the Consumer Expenditure Surveys: <u>https://www.bls.gov/cex/tables/calendar-year/mean/cu-all-detail-2021.pdf</u>.

<sup>&</sup>lt;sup>98</sup> US PIRG used smartphones, laptops, refrigerators, and washing machines. Proctor, *Repair Saves Families Big*, p.
6.

The US PIRG Report is also methodologically flawed because it double counts those products that are already successfully repaired. The Report assumes that zero products are being repaired. US PIRG also fails to consider how many repairs are covered under warranty, extended warranty, or an insurance plan.

## Conclusion

For these reasons, the Commission should deny US PIRG's and iFixit's petition for rulemaking in whole. Petitioners fail to comply 16 C.F.R. § 1.31, which severely limits the public's ability to participate in the petition for rulemaking process. Petitioners also ask the FTC to engage in rulemaking authority that the Commission does not have. Finally, Petitioners fail to justify why right to repair rules warrant consideration by the Commission. And the Petitioners' proposals would harm consumers and competition more than they would help. In actuality, the rules petitioned for would likely increase the regulatory hurdles for smaller manufacturers and have the effect of increasing concentration in several product markets. And, by making products less durable and limiting manufacturers' ability to improve on durability, at least one of the Petitioners stands to financially benefit from this proceeding.

Respectfully submitted,

Alex R. Reinauer Research Fellow Competitive Enterprise Institute <u>Alex.Reinauer@cei.org</u>

1310 L Street, 7<sup>th</sup> Floor Washington, DC 20005

Date: February 2, 2024