

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF CALIFORNIA

VICKY MALDONADO, et al.,

Plaintiffs,

v.

APPLE, INC, et al.,

Defendants.

Case No. [3:16-cv-04067-WHO](#)**ORDER ON MOTION TO DECERTIFY
THE CLASS, MOTIONS TO EXCLUDE**Re: Dkt. Nos. 239, 240, 241, 242, 243, 247,
248, 249, 250**INTRODUCTION**

When a consumer purchases an iPhone or iPad from defendant Apple,¹ she can also choose to purchase an AppleCare or AppleCare+ (“AC/AC+”) plan for the device. If her device has hardware issues, AC/AC+ obligates Apple to repair it or to replace it with a device that is new or “equivalent to new in performance and reliability.” Apple replacements can either be all-new or “remanufactured” with some previously used components taken from other Apple devices. According to the plaintiffs, Apple breaches the AC/AC+ contracts every time it gives a consumer a remanufactured device because the strain already placed on the used parts ensures those devices can never be equivalent to new in performance or reliability. I certified a nationwide class in September 2019 on breach of contract and warranty claims. Trial is set in August.

Before me are Apple’s motion to decertify the class and four *Daubert* motions from each party. Apple’s motion to decertify is denied. Apple’s arguments are either repackaged versions of those it made at certification, misapprehend the plaintiffs’ theory, are for the merits, or are otherwise unconvincing. Both parties’ *Daubert* motions are denied with two exceptions. The

¹ “Apple” refers to defendants Apple, Inc., AppleCare Service Company, Inc., and Apple CSC Inc.

1 plaintiffs' motions to exclude one specific economic opinion by one of Apple's survey design
 2 experts and the opinions of its technical rebuttal expert are granted. This aside, both parties'
 3 expert evidence is fit for trial.

4 BACKGROUND

5 I. FACTUAL BACKGROUND

6 I have discussed the facts of this case in several previous orders, most extensively my
 7 Order Certifying Class and Denying Defendants' Motion for Summary Judgment ("Cert. Order")
 8 [Dkt. No. 155]. I repeat here only the facts essential to understanding the current motions.

9 Apple sells, among other things, the iPhone smartphone and iPad tablet computer. They
 10 generally come with a standard one-year hardware warranty and 90 days of free technical support.
 11 Cert. Order 1–2. Apple also sells or sold AC/AC+ plans that provide a second year of non-
 12 accidental hardware coverage, two years of accidental damage coverage, and two years of
 13 technical support. *Id.* 2. When a consumer brings in an iPhone or iPad (often, collectively, a
 14 "device") under an AC/AC+ plan that has a hardware issue, Apple either repairs it or replaces it.
 15 *Id.* As noted, when Apple replaces the device, the replacement is either new or remanufactured.
 16 *Id.* A remanufactured (sometimes called refurbished) device uses some components or parts that
 17 have been "recovered" from other returned Apple devices. *Id.* In other words, a new device has
 18 all-new parts; a remanufactured device has some, varying, used ones. *Id.* These used parts have
 19 been removed from other devices, tested, and placed into new devices. *Id.* 2–3.²

20 Under the AC/AC+ contracts, a replacement must either be "new or equivalent to new in
 21 performance and reliability." *Id.* 2 (quoting AC+ Plan). "Performance" is how well a device
 22 functions. Reliability is the likelihood it will fail. According to the plaintiffs—as explained
 23 below—a remanufactured device can never be as reliable as a new one because the stress or "load"
 24 that has been placed on the used parts renders them less reliable. Apple disputes this.

25 II. PROCEDURAL BACKGROUND

26 The plaintiffs filed their complaint in July 2016 and an amended complaint in November
 27

28 ² There are further aspects of the remanufacturing process not relevant here. *See* Cert. Order 2–5.

1 2016. Dkt. Nos. 1, 45. In March 2017, I granted in part and denied in part Apple’s motion to
2 dismiss. Dkt. No. 64. At the parties’ request, discovery and the case schedule were repeatedly
3 extended. In February 2019, the plaintiffs moved to certify a class. Dkt. No. 103. In March 2019,
4 Apple moved for summary judgment. Dkt. No. 111. Because of the overlap, I heard the motions
5 together in August 2019. Dkt. No. 149. In September 2019, I denied Apple’s motion for
6 summary judgment and granted the plaintiffs’ motion to certify the class. I narrowed the
7 plaintiffs’ proposed class period and otherwise accepted their class definition: “All individuals
8 who purchased AppleCare or AppleCare+, either directly or through the iPhone Upgrade Program,
9 on or after July 20, 2012, and received a remanufactured replacement Device.” *Id.* 27. Discovery
10 continued and the schedule was again extended at the parties’ requests. I approved a class notice
11 plan in July 2020. Dkt. No. 217. In January 2021, I denied the plaintiffs’ motion to modify the
12 class definition to include individuals who had not received devices. Dkt. No. 237.

13 In late January, Apple moved to decertify the class and both parties filed their *Daubert*
14 motions on an extended briefing schedule. Briefing ended in late March and I held a hearing on
15 April 14. Dkt. No. 298. I asked the parties for supplemental briefs on standing and choice of law,
16 which were submitted at the end of April.

17 LEGAL STANDARD

18 I. CLASS DECERTIFICATION

19 “Even after a certification order is entered, the judge remains free to modify it in the light
20 of subsequent developments in the litigation.” *General Telephone Co. of Southwest v. Falcon*,
21 457 U.S. 147, 160 (1982). I have previously explained that, “[t]he burden of showing why I
22 should consider decertification falls squarely on the shoulders of defendants.” *In re Korean*
23 *Ramen Antitrust Litig.*, No. 13-CV-04115-WHO, 2018 WL 1456618, at *2 (N.D. Cal. Mar. 23,
24 2018). The defendant must “make some showing of changed circumstances or law.” 3 Newberg
25 on Class Actions § 7:39 (5th ed.); *accord Korean Ramen*, 2018 WL 1456618, at *2. Once this
26 initial burden is met, the plaintiff must demonstrate that the class action should be “maintain[ed]”
27 under Federal Rule of Procedure 23. *Marlo v. United Parcel Serv., Inc.*, 639 F.3d 942 (9th Cir.
28 2011); *see also* Cert. Order 8–9 (laying out certification standard).

1 **II. DAUBERT MOTIONS**

2 Federal Rule of Evidence 702 allows a qualified expert to testify “in the form of an opinion
3 or otherwise” where: (a) the expert’s scientific, technical, or other specialized knowledge will help
4 the trier of fact to understand the evidence or to determine a fact in issue; (b) the testimony is
5 based on sufficient facts or data; (c) the testimony is the product of reliable principles and
6 methods; and (d) the expert has reliably applied the principles and methods to the facts of the case.
7 Fed. R. Evid. 702. Expert testimony is admissible under Rule 702 if it is both relevant and
8 reliable. *See Daubert v. Merrell Dow Pharm., Inc.*, 509 U.S. 579, 589 (1993). “[R]elevance
9 means that the evidence will assist the trier of fact to understand or determine a fact in issue.”
10 *Cooper v. Brown*, 510 F.3d 870, 942 (9th Cir. 2007); *see also Primiano v. Cook*, 598 F.3d 558,
11 564 (9th Cir. 2010) (“The requirement that the opinion testimony assist the trier of fact goes
12 primarily to relevance.”) (internal quotation marks omitted).

13 Under the reliability requirement, the expert testimony must “ha[ve] a reliable basis in the
14 knowledge and experience of the relevant discipline.” *Primiano*, 598 F.3d at 565. To ensure
15 reliability, the court must “assess the [expert’s] reasoning or methodology, using as appropriate
16 such criteria as testability, publication in peer reviewed literature, and general acceptance.” *Id.*
17 These factors are “helpful, not definitive,” and a court has discretion to decide how to test
18 reliability “based on the particular circumstances of the particular case.” *Id.* (internal quotation
19 marks and footnotes omitted). “When evaluating specialized or technical expert opinion
20 testimony, the relevant reliability concerns may focus upon personal knowledge or experience.”
21 *United States v. Sandoval-Mendoza*, 472 F.3d 645, 655 (9th Cir. 2006).

22 The inquiry into the admissibility of expert testimony is “a flexible one” in which “[s]haky
23 but admissible evidence is to be attacked by cross examination, contrary evidence, and attention to
24 the burden of proof, not exclusion.” *Primiano*, 598 F.3d at 564. The burden is on the proponent
25 of the expert testimony to show, by a preponderance of the evidence, that the admissibility
26 requirements are satisfied. *Lust By & Through Lust v. Merrell Dow Pharm., Inc.*, 89 F.3d 594,
27 598 (9th Cir. 1996); *see also* Fed. R. Evid. 702 advisory committee’s note.

28

1 **DISCUSSION**

2 **I. MOTION TO DECERTIFY THE CLASS**

3 Apple argues that the class must be decertified because developments since class
4 certification show that a breach of contract cannot be proven on a class-wide basis and that some
5 class members are unharmed. Motion to Decertify the Class (“Decert. Mot.”) [Dkt. No. 239]. It
6 separately contends that the consumer protection claims must be decertified because they may
7 only be brought by California residents. *Id.* The plaintiffs counter that these arguments were or
8 should have been made at class certification, that they are “rehashes” of arguments that were made
9 then, and that they are meritless in any event. I agree that they lack merit; the motion is DENIED.

10 **A. Apple’s Initial Burden**

11 Apple agrees that—even though the plaintiffs bear the burden of showing class
12 certification is proper—it bears the initial burden to show there is some “changed circumstance”
13 warranting reconsideration. *See* Defendants’ Reply ISO Decert. Mot. (“Decert. Reply”) [Dkt. No.
14 291] 2; *Korean Ramen*, 2018 WL 1456618, at *2. The plaintiffs argue that Apple has not met this
15 initial burden. *See* Plaintiffs’ Response in Opposition to the Decert. Mot. (“Oppo.”) [Dkt. No.
16 273] 2–10. As explained below with respect to particular arguments, Apple could and should have
17 raised some of its points sooner, especially at class certification. Nevertheless, much of Apple’s
18 argument depends on evidence that was developed after class certification such as merits
19 depositions of the plaintiffs’ experts. I therefore address Apple’s arguments.

20 **B. Whether the Elements of Breach Can be Proven Class-Wide**

21 Apple argues that “[m]erits expert discovery has demonstrated that Plaintiffs cannot
22 demonstrate class-wide breach, causation, and damages” for three reasons. Decert. Mot. 16–17. I
23 address each below.

24 **i. Alleged Lack of Evidence of Inferiority of Class Devices**

25 First, Apple contends that, at class certification, the plaintiffs “represent[ed] that they could
26 provide common evidence demonstrating that all devices with recovered parts are not ‘equivalent
27 to new in performance and reliability.’” *Id.* 17 (citing Dkt. No. 160 at 10–11, 19). But, Apple
28 says, discovery shows that “Plaintiffs have not delivered what they promised.” *Id.* Instead,

1 “[n]either of Plaintiff’s [sic] reliability engineering experts has even attempted to opine on
2 whether load conditions on non-new parts have actually caused any class devices, much less all
3 class devices, to be inferior to new devices.” *Id.*

4 Apple’s argument is contradicted by the plaintiffs’ evidence. The plaintiffs’ technical
5 expert, Dr. Michael Pecht, is the same expert they submitted at class certification; he resubmitted
6 his report as a merits report. *See* Expert Report of Michael Pecht (“Pecht Rep.”) [Dkt. No. 266-2].
7 His core opinion is that, “[d]evices containing salvaged (used) components can never be as
8 reliable as devices containing new components, meaning remanufactured devices can never be
9 equivalent to new in reliability. Furthermore, devices’ performance is also likely to be adversely
10 impacted by load conditions.” *Id.* at 14.³ If a jury credited his opinion, it could conclude that no
11 remanufactured device—necessarily including the class devices—is “equivalent to new in
12 reliability” by its nature as a remanufactured device. Apple’s argument goes to the merits of this
13 theory. This is what I held sufficient at class certification. *See* Cert. Order 19–22.

14 Apple argues that the plaintiffs’ technical rebuttal expert, Dasgupta, undermined the
15 theory. They rely on a single quote from Dasgupta’s deposition. As Apple characterizes it,
16 Dasgupta explained that “[t]he idea behind the science is to determine, ‘through experiments and
17 modeling,’ how ‘many’ stresses a device can ‘withstand before it starts to develop problems.’”
18 Decert Mot. 17 (quoting Deposition of Abhijit Dasgupta (“Dasgupta Dep.”) [Dkt. No. 244-5] at
19 23–24)). Dasgupta’s full quote, however, makes clear that this modeling and experimentation
20 would be necessary to determine the “*specific amount*” of stress on the device. Dasgupta Dep. at
21 23–24 (emphasis added). He does not call into question the fundamental principle that Pecht
22 advances: that any load renders a part less reliable. Indeed, elsewhere in the deposition he
23 explicitly rejected Apple’s suggestions on this issue and opined, among other things, that
24 “fundamental theories of reliability physics say that [a remanufactured device being equivalent to
25 new in reliability] cannot be true.” Dasgupta Dep. at 15, 51:9–19.

26
27
28

³ Citations to exhibits are to the documents’ ECF-generated page numbers.

1 **ii. Distinguishing Between “Harmful” and “Benign” Effects**

2 Apple contends that, even if Pecht’s opinion is correct, it is unable to distinguish between
3 what Apple calls “benign” (or sometimes “imperceptible” or “minute”) and “harmful” (sometimes
4 “appreciable”) effects of the load. Decert. Mot. 18–19. It argues that differentiating between
5 these two concepts requires testing of individual devices and is therefore not suitable for class-
6 wide determination. Apple interprets the plaintiffs’ experts as admitting that some loads are
7 benign; the plaintiffs disagree with this interpretation.

8 Apple’s argument is again “based on a misunderstanding of plaintiffs’ theory of liability.”
9 Cert. Order 9. This is not a tortious product defect case. It is a breach of contract and warranty
10 case. Apple’s obligation was to provide new or equivalent-to-new devices. If it failed to do so, it
11 breached. The moment a class member received a device that was not equivalent to new in
12 reliability, she was injured because she did not get what she bargained for. *See Nguyen v. Nissan*
13 *N. Am., Inc.*, 932 F.3d 811, 822 (9th Cir. 2019).

14 True, a jury can always determine that a breach was not material—that is, that Apple
15 substantially performed. *See, e.g., Brown v. Grimes*, 192 Cal. App. 4th 265, 277 (2011). But that
16 determination does not require individualized adjudication for each device and therefore does not
17 defeat predominance. The reason is based on the plaintiffs’ theory of liability. That theory is
18 premised on the nature of a remanufactured device. It comes (from the plaintiffs’ perspective)
19 with an important strength: it is amenable to class treatment because it is based on a determination
20 about all devices due to their *inherent* characteristics. But it also comes with an important
21 weakness: if a jury determines that the plaintiffs are wrong—that a remanufactured device *can* be
22 equivalent to new in reliability—then the plaintiffs’ theory fails on the merits. Accordingly,
23 common issues continue to predominate.⁴

24 Surprisingly, the plaintiffs now resist this characterization of their theory in two related

25 _____
26 ⁴ I do not comment on the merits of the “benign” effects theory, including whether it *would* permit
27 a jury to find substantial performance or whether Pecht’s few deposition statements show such a
28 theory is viable. Apple’s interpretation of Pecht’s evidence—and the existence of “benign” or
“imperceptible loads—is strongly contested by the plaintiffs. *See* Decert. Oppo. 12–13.

1 ways. First, the plaintiffs argue that this issue is “moot” as no class members will have devices
 2 with only these “imperceptible” loads. Decert. Oppo. 12–15. They argue that new devices are
 3 returned within fourteen days of purchase are treated as “reclaimed” devices that are redistributed
 4 (so long as they are functional) rather than salvaged for parts. *Id.* These devices, the plaintiffs
 5 argue, have minute loads and are not class devices. As explained above, I do not reject Apple’s
 6 argument on this basis. While it seems that, as a matter of common sense, this process would
 7 reduce the *likelihood* of components with only de minimis loads being in class devices, it does not
 8 refute Apple’s argument because it does not mean that other components that are remanufactured
 9 (say, from a fifteen-day-old device) would not end up in class devices.⁵ It is also no answer to
 10 Apple’s concern about class-wide proof, addressed elsewhere. Indeed, it arguably undercuts the
 11 plaintiffs’ theory because it seems to be an admission that some loads are in fact “benign” or
 12 “immaterial” and would not raise AC/AC+ problems.

13 Relatedly, the plaintiffs now say that this is an issue that can be sorted out with
 14 individualized *damages*. *Id.* 18–19. Their attempt to have their cake and eat it too is
 15 unpersuasive. Their case is premised on the problem with the remanufactured devices being
 16 inherent in them. *That* is why I have found that common issues predominate. *See, e.g.,* Cert.
 17 Order 16–17. That is also why I found the plaintiffs’ theory viable under cases like *Nguyen*. *Id.*
 18 17–24. But now, the plaintiffs essentially contend that it matters little whether the problem is
 19 inherent because devices without the problem will just not be recompensed at the damages phase.
 20 That does not align with their theory and risks undermining their predominance arguments. *See,*
 21 *e.g.,* Dkt. No. 100 at 18 (plaintiffs’ motion for class certification arguing that predominance is met
 22 because “remanufactured devices can never be equivalent to new because they contain used parts
 23 that have been subject to load conditions.”). As explained, the plaintiffs’ met the predominance
 24 bar because it is binary: remanufactured devices are *per se* not equivalent to new or they are. It
 25 will be left to a jury to determine whether the plaintiffs or Apple are correct about what the
 26 evidence actually proves.

27
 28 ⁵ Apple represents that reclaimed device parts do end up in remanufactured devices in any event.

1 **iii. Statistical Evidence**

2 Apple’s last argument about class-wide proof attacks the analysis of the plaintiffs’
3 statistical expert, Dr. Robert Bardwell. Its criticisms repeat those in its *Daubert* motion, which I
4 deny for the reasons explained below. The analysis below shows that Bardwell’s opinions are
5 appropriate for class-wide treatment on the plaintiffs’ theory of damages.

6 **C. Whether There Are Unharmed Class Members**

7 Apple’s next argument is that discovery from the plaintiffs’ damages experts
8 “affirmatively demonstrate[s] that large portions of the class suffered no harm or injury and that
9 the class must be decertified.” Decert. Mot. 21 (emphasis removed). It contends that there are
10 four reasons this is so. None has merit.

11 First, Apple asserts that Bardwell’s statistics show that the majority of class members
12 never returned their devices to Apple. *Id.* That is irrelevant at this stage. Just because a consumer
13 does not return a device does not mean that the device failed to be “equivalent to new in
14 reliability.” It also does not mean the consumer was not injured. As explained, the injury
15 occurred when Apple (allegedly) breached and gave the consumer a device that did not live up to
16 its contractual obligations. The consumer’s injury, on the plaintiff’s theory, is that she was
17 deprived of the benefit of her bargain and “[o]ne measure of the inferiority of the devices is the
18 difference in retail price between new devices and those the plaintiffs received.” Cert. Order 23.

19 Second, Apple argues that Bardwell’s data show that 6.1 percent of the class devices had
20 *lower* failure rates than new devices. Decert. Mot. 23. The plaintiffs dispute this interpretation.
21 Decert. Oppo. 21–22. This is a merits dispute. A jury might credit Apple’s interpretation of the
22 data as evidence that Pecht’s theory is incorrect. But that does not mean that individual issues
23 predominate; it would mean the plaintiffs could not prove their case if a jury agreed with Apple.

24 Third, Apple argues that the data show that some class members prefer devices with some
25 used parts. Decert. Mot. 23–24. Again, the plaintiffs dispute this interpretation of the data.
26 Decert. Oppo. 23–24. Apple cites no authority for—and, really, does not even explain—why this
27 matters to the inquiry. Apple would still have breached the contract.

28 Fourth, Apple contends that the data show that “more than 250,000 class devices (over

1 6.5%) were provided to class members who subsequently returned those devices and received
2 replacement devices containing only new parts.” Decert. Mot. 24. For the reasons explained in
3 more detail below in my discussion of Apple’s motion to exclude the plaintiffs’ damages expert,
4 Dr. Kaufman, this is irrelevant to the plaintiffs’ benefit-of-the-bargain damages theory.

5 **D. *Olean***

6 After briefing closed, the Ninth Circuit issued its decision in *Olean Wholesale Grocery*
7 *Coop., Inc. v. Bumble Bee Foods LLC*, 993 F.3d 774 (9th Cir. 2021). Apple relied on it heavily at
8 the hearing. In that case, the Ninth Circuit examined “representative evidence.” *Id.* at 787. It is
9 well-established that plaintiffs can use a representative sample of statistical evidence to establish
10 class-wide liability. *Tyson Foods, Inc. v. Bouaphakeo*, 577 U.S. 442, 459–60 (2016). *Olean*
11 elaborated on the standards that apply to this evidence. *See Olean*, 993 F.3d at 788–90. Relevant
12 to Apple’s argument, it held that “[c]ourts must . . . rigorously analyze the use of such evidence to
13 test its reliability and to see if the statistical modeling does in fact mask individualized
14 differences.” *Id.* at 791. There, the district court erred by failing to make a determination about
15 whether “the plaintiffs’ statistical evidence sweeps in uninjured class members.” *Id.* Too many
16 uninjured class members, the court said, would defeat predominance. *Id.* It charged district courts
17 with “resolv[ing] the competing expert claims on the reliability of Plaintiffs’ statistical model”
18 before certifying a class. *Id.*

19 *Olean* has nothing to do with the issues here. The worry with representative statistical
20 evidence is that it only looks at a sample of the class and, if done incorrectly, may not illustrate the
21 impact on the whole class. *Id.* at 791–92. That danger is not present here because the plaintiffs’
22 theory does not depend on representative statistical evidence. Their primary evidence will be
23 Pecht’s opinion based on scientific principles.

24 Bardwell’s evidence, though statistical, is not a *sample* being used to demonstrate harm to
25 the class. Instead, Bardwell looks at the entirety of the data. In any event, the plaintiffs’ theory
26 does not rest on particular devices functioning or malfunctioning, so this is still not an *Olean*
27 issue. *Olean* is concerned with predominance. Here, as I have explained across several contexts
28 and will explain across several more below, common issues predominate whether the plaintiffs are

1 right or wrong on the merits of their evidence.

2 **E. Choice of Law and Standing**

3 In the initial round of briefing, the parties disputed for the first time whether the claims
4 under the Unfair Competition Law and Song-Beverly Consumer Warranty Act can be brought on
5 behalf of a nationwide class and whether the named plaintiffs have standing to bring those claims.
6 Because the standing issue goes to jurisdiction and the parties addressed it only glancingly, I asked
7 each to submit a supplemental brief at the hearing. Neither of the named plaintiffs here is a
8 California resident nor purchased their class device in California. *See* Dkt. No. 45 ¶¶ 8–9, 85–
9 114.⁶

10 **i. The Correct Test**

11 The parties' first disagreement is over the correct choice-of-law test. Apple says that the
12 general governmental interest test laid down in *Mazza v. Am. Honda Motor Co.*, 666 F.3d 581 (9th
13 Cir. 2012), governs because the causes of action are statutory. *See* Defendants' Supplemental
14 Brief ISO Decert. Mot. ("Apple Supp. Br.") [Dkt. No. 302] 2. The plaintiffs assert that *Nedlloyd*
15 *Lines B.V. v. Superior Ct.*, 3 Cal. 4th 459, 834 P.2d 1148 (1992) supplies the correct standard
16 because the AC/AC+ plans contain a choice-of-law provision selecting California law. *See*
17 Supplemental Brief IOT Decert. Mot. ("Pl. Supp. Br.") [Dkt. No. 303] 1–2.

18 I agree with the plaintiffs: the *Nedlloyd* test governs these claims. As the California
19 Supreme Court has explained, "California has two different analyses for selecting which law
20 should be applied in an action. When the parties have an agreement that another jurisdiction's law
21 will govern their disputes, the appropriate analysis for the trial court to undertake is set forth in
22 *Nedlloyd* . . . which addresses the enforceability of contractual choice-of-law provisions.

23 Alternatively, when there is no advance agreement on applicable law, but the action involves the
24 claims of residents from outside California, the trial court may analyze the governmental interests
25 of the various jurisdictions involved to select the most appropriate law." *Washington Mut. Bank,*
26 *FA v. Superior Ct.*, 24 Cal. 4th 906, 914–15 (2001). In *Nedlloyd*, the California Supreme Court

27 _____
28 ⁶ Because standing is jurisdictional and is intertwined with the choice-of-law question, I address both issues despite Apple's failure to raise them in a timely way.

1 held that choice-of-law clauses in contracts are generally enforceable and laid out a multipart test
2 to determine whether to follow the contracted-for jurisdiction's law or disregard it. *Nedlloyd*, 3
3 Cal. 4th at 465.

4 Apple attempts to distinguish *Nedlloyd* because "state statutory law" gives the plaintiffs
5 their relevant causes of action while *Nedlloyd* was about contractual claims. Apple Supp. Br. 2.
6 *Nedlloyd*, though, concerned not only a breach of contract claim but tort or tort-like claims *arising*
7 *from* the contract like breach of the covenant of good faith and fair dealing and breach of fiduciary
8 duty. *Nedlloyd*, 3 Cal. 4th at 463. The Ninth Circuit has read *Nedlloyd* to apply to claims that
9 "arise" from contracts, not merely claims for breach of the contract. *In re Hyundai & Kia Fuel*
10 *Econ. Litig.*, 926 F.3d 539, 562 & n.5 (9th Cir. 2019). Here, the parties contracted to apply the
11 law of California to disputes arising from their AC/AC+ contracts and these particular UCL and
12 Song-Beverly claims do.

13 Apple's argument to the contrary depends on two Ninth Circuit cases, *Hyundai* and *Senne*
14 *v. Kansas City Royals Baseball Corp.*, 934 F.3d 918 (9th Cir. 2019), which it argues "rejected the
15 application of *Nedlloyd*'s choice-of-law analysis to claims arising out of state statutory law, even
16 in the presence of contractual choice-of-law provisions." See Apple Supp. Br. 2. Apple misreads
17 those decisions. *Hyundai* explicitly distinguished *Nedlloyd*, explaining that "the claims in
18 *Nedlloyd* arose from the contract, namely, breach of the implied covenant of good faith and fair
19 dealing and breach of fiduciary duty. Here, the claims arise from the automakers' *advertising*
20 *misrepresentations*, not the sales contracts." *Hyundai*, 926 F.3d at 562 n.9 (emphasis added). In
21 *Senne*, the Ninth Circuit simply applied the usual governmental interest test; it did not state or
22 imply that *Nedlloyd* categorically cannot apply to claims brought under state consumer protection
23 law that arise from contracts. *Senne* also involved *wage-and-hour claims* for allegedly unpaid or
24 underpaid work, not an allegation about whether a contract was violated or contained actionable
25 misrepresentations. *Senne*, 934 F.3d at 924. Apple's reliance seems to come from the fact that the
26 dissent invoked *Nedlloyd*. See *id.* at 960–61 (Ikuta, J., dissenting). The majority did not reject
27 *Nedlloyd*'s applicability to a case like this.
28

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28**ii. Application of the Test****1. Whether There is a Choice-of-Law Clause**

Despite the parties’ discussion of whether a choice-of-law clause should be respected, Apple’s supplemental brief contends, for the first time, that AC/AC+ contracts actually have no choice of law provision selecting California law. Apple Supp. Br. 5. But those plans could not be clearer: “Except where prohibited by law, the laws of the State of California govern Plans purchased in the United States.” Dkt. No. 103-2 at 7. The presence of such an unambiguous choice-of-law clause is why Apple’s primary briefing describes the plaintiffs as “[i]nvoicing the AppleCare contract’s choice-of-law provision.” Decert. Reply 15. Its eleventh-hour acrobatics to find some other meaning are unconvincing.

Apple attempts to show that the remainder of the contract, in clear contradiction of the choice-of-law clause, contemplates that other states’ consumer protection laws will apply. But the provisions it cites are the boilerplate warnings to consumers that the “benefits conferred by” the AC/AC+ plan “are in addition to all rights and remedies provided under” states’ consumer protection laws. *See* Dkt. No. 103-2 at 1. Relatedly, the contract lists specific protections that customers in different states can be entitled to. *Id.* at 9–10. None of this changes the fundamental fact that the parties selected California law by contract. These statements are there because parties cannot contract around state law; they are meant to apprise consumers of their rights. While consumers in those states may be entitled to invoke their additional protections against Apple as well, that does not change that the parties subjected themselves to California law. Another court has rejected essentially this argument from Apple. *See In re Apple Inc. Device Performance Litig.*, 386 F. Supp. 3d 1155, 1169 (N.D. Cal. 2019) (“At most, these provisions indicate that the SLA’s limitations on warranties and damages do not apply when they conflict with local law.”).

2. Whether the Choice-of-Law Clause is Overcome

Under the *Nedlloyd* framework, the court first asks whether the parties’ chosen state—here, California—has a “substantial relationship” to them or the transaction or whether there is another “reasonable basis” for their choice. *Nedlloyd*, 3 Cal. 4th at 466. There is a “substantial

1 relationship” to the parties at least because Apple Inc. is incorporated and headquartered in
2 California and AppleCare Services is a wholly owned-subsiary of it. Dkt. No. 69 ¶¶ 10–11.
3 Apple does not dispute that this step of the test is met.

4 Next, courts ask whether application of California law is contrary to a fundamental public
5 policy of another state and, if so, whether the other state has a materially greater interest in
6 resolving the dispute. *Nedlloyd*, 3 Cal. 4th at 466. The burden is on Apple to show that foreign
7 law, not California law, should apply. *Washington Mut.*, 24 Cal. 4th at 919. Apple has failed to
8 point to a contrary fundamental policy. Apple’s supplemental brief argues that “state consumer
9 protection regimes constitute ‘fundamental policies.’” Apple Supp. Br. 5. But Apple has not
10 pointed to anything in those states’ laws that shows a conflict between California law and any
11 fundamental policy. It also lists purported differences between California law and the laws in a
12 few other states in what conduct is prohibited, the remedies available, and statutes of limitations.
13 *See* Apple Supp. Br. 3–4. The discussion of each state’s law is limited to roughly one sentence
14 each and covers, by my count, a single variation each in Colorado, North Carolina, Rhode Island,
15 Washington, Arizona, Georgia, Montana, and New Jersey. *Id.*

16 Apple has not met its burden. First, it had to show *conflicts* in *fundamental* policy, not just
17 *differences* in law. *Washington Mut.*, 24 Cal. 4th at 919. Second, it had to do so for every foreign
18 law it tries to apply, which it has not attempted to do. Third, what it does include is almost
19 entirely devoid of explanation or real analysis. Fourth, Apple does not train its fire on the issue
20 here, which is essentially an alleged violation of a contract. Even its cursory examples often focus
21 on other aspects of consumer protection law. It would be surprising for any state in the Union to
22 have a fundamental policy against claims for, essentially, a breach of the express terms of a
23 contract. In any event, if some state’s fundamental policy would be undermined by such a
24 universal claim, Apple has not shown it.⁷ It is, therefore, not a surprise that in every previous
25

26 ⁷ Apple states that these variations in law are merely examples and “[d]ue to the five-page limit for
27 this [supplemental] brief, Apple is unable to list all of the applicable state laws and all the
28 differences between them. Apple is prepared to submit a short appendix with charts addressing
each state’s laws relevant to the claims.” Apple Supp. Br. 3. Apple’s argument is especially
poorly taken given the posture of this issue. Apple did not raise it at the pleadings or at summary
judgment or at class certification. It raised it for the first time *in a single page* in its motion to

1 filing in this case, including at class certification, Apple exclusively applied California law.

2 **iii. Standing**

3 Apple's challenge to standing is derivative of its challenge to the choice of law. In short, it
 4 asserts that named plaintiffs categorically cannot bring consumer protection claims for states in
 5 which they do not reside or where their transaction did not occur. *See* Apple Supp. Br. 1–2.
 6 Apple relies on my decision in *Johnson v. Nissan N. Am., Inc.*, 272 F. Supp. 3d 1168 (N.D. Cal.
 7 2017), and several other related district court cases. That line of cases is distinct from the situation
 8 here because of the choice-of-law clause. In *Johnson*, the plaintiffs tried (among other things) to
 9 bring claims on behalf of a nationwide class based on thirty-four state's laws. *Johnson*, 272 F.
 10 Supp 3d at 1175–76. I found that they lacked standing to do so. Here, the named plaintiffs
 11 represent a class in which one's state's law applies—the law selected via contract. *Johnson* and its
 12 predecessor cases are inapplicable.

13 Apple's argument also risks leaving some plaintiffs in limbo: unable to invoke their own
 14 state's laws due to a choice-of-law clause but unable to show standing under that law. Regardless,
 15 the requirements for Article III standing are met. The named plaintiffs were (allegedly) injured,
 16 their injuries are fairly traceable to Apple's alleged breach, and damages would redress their
 17 injuries. *See Lujan v. Defs. of Wildlife*, 504 U.S. 555, 560–61 (1992).

18 **II. MOTIONS TO EXCLUDE TECHNICAL AND STATISTICAL EXPERTS**

19 **A. Motion to Exclude Pecht**

20 Apple moves to exclude the testimony of Dr. Michael Pecht for failing to “fit” this case or
 21 apply a proper methodology. *See* Defendants' Motion to Exclude the Expert Testimony of
 22 Michael Pecht, Ph.D. (“Pecht Mot.”) [Dkt. No. 240]. The motion is DENIED.

23 Apple does not challenge Pecht's qualifications as an expert in reliability science, so I do
 24 not discuss them in detail. Suffice it to say he has lengthy, deep, and impressive experience in the
 25 field. *See* Pecht Rep. 4–5 (laying out numerous qualifications).

26 _____
 27 decertify more than a year after certification. I then *sua sponte* permitted it to file this brief.
 28 Because the contract (that Apple itself wrote) mandates that California law applies, Apple has the
 burden of showing it should not. It has now had more opportunities than most litigants to meet
 that burden. Its time has come and gone.

1 Pecht renders opinions about the reliability of Apple’s remanufactured devices. *See id.* at
 2 11–14. As relevant here, the basic outline of his core opinion is that “[e]very iPhone or iPad used
 3 by a consumer will be subjected to some load conditions. These load (stress) conditions occur as a
 4 result of simply operating the device and will vary depending on numerous factors.” *Id.* at 12. In
 5 turn, “[l]oad (stress) conditions age materials, degrade components of the device, and thus use up
 6 the life of a component and the device itself.” *Id.* These conditions degrade components and the
 7 devices and “could” result in performance degradation as well. *Id.* Most importantly, Pecht
 8 concludes that, due to the load conditions placed on the components of devices that are then
 9 placed into remanufactured devices, a remanufactured device “cannot be equal [to a] new [device]
 10 in reliability.” *Id.* at 13. Put another way, “remanufactured devices containing used components
 11 can never be as reliable as new devices containing all new components.” *Id.*

12 **i. “Fit” to the Case**

13 Apple’s first ground for exclusion is that Pecht’s opinion that remanufactured devices can
 14 never be as reliable to new does not “fit” the legal requirements of the plaintiffs’ claims. *See City*
 15 *of Pomona v. SQM N. Am. Corp.*, 750 F.3d 1036, 1044 (9th Cir. 2014). Apple makes a series of
 16 arguments that, while sounding in the same register, are distinct.

17 **1. Interpretation of the AC/AC+ Language**

18 According to Apple, Pecht’s opinion is premised on a legally erroneous interpretation of
 19 the AC/AC+ contracts at issue and, as a result, must be excluded. Pecht Mot. 10–13. Again, the
 20 phrase at issue in this case is that an AC/AC+ replacement device must be “new or equivalent to
 21 new in performance and reliability.” “Equivalent,” Apple asserts, should not be understood from
 22 dictionaries and caselaw to mean “identical,” but instead to mean “nearly equal,” “virtually
 23 identical,” “tantamount to,” or a similar formulation. Pecht Mot. at 11–12 (citing dictionaries and
 24 case law).⁸ But Pecht, Apple argues, has supplied his own, different definition that requires
 25 complete identity. On Apple’s account, Pecht concludes that a device is not “equivalent” to new
 26

27 ⁸ The plaintiffs define “equivalent” in essentially the same way as Apple. *See* Plaintiffs’ Response
 28 in Opposition to Pecht Mot. [Dkt. No. 266] 10 (“corresponding or virtually identical especially in
 effect or function”).

1 in reliability “if it is subject to *any* loads of *any* magnitude.” *Id.* 12. Apple says that his opinion
2 encompasses situations in which the device’s lifespan is reduced “by even 30 seconds” or where
3 the load/stress applied to the device is “benign,” “tiny,” or “imperceptible.” *Id.*

4 This does not warrant exclusion. Pecht’s opinion is straightforward: when a device is
5 made from used parts, it is inherently less reliable than a device made from all-new parts because
6 the used parts have necessarily undergone stress that new parts have not. *See* Pecht Rep. at 13–14.
7 And one of Apple’s contractual obligations is to provide replacement devices that are “equivalent
8 to new in . . . reliability.” If a jury were to credit Pecht’s opinion, it could then conclude that no
9 remanufactured device (as Apple makes them) is equivalent to new in reliability because those
10 devices contain components that are more stressed and, therefore, will fail sooner.

11 Apple’s attempt to transform this into an issue of contract interpretation is unpersuasive.
12 Pecht’s opinion does not depend on some special—let alone legally incorrect—interpretation of
13 the contract. To the contrary, the contract requires reliability equivalence between new and
14 remanufactured devices given as replacements and Pecht opines there is not this equivalence.
15 Apple’s objection therefore boils down to the assertion that some class devices’ decrease in
16 reliability is only *de minimis* (or, in Apple’s words, “benign” or “imperceptible”) compared to
17 new devices. As explained above, that is an issue for the jury. If a jury credits Apple’s theory, it
18 might conclude that at least some class devices *are* “equivalent to new in reliability” because any
19 difference in reliability is immaterial. But that does not mean that Pecht’s opinion does not “fit”
20 the case; it is squarely aimed at supporting the theory of liability the plaintiffs have advanced and
21 that survived at class certification. *See* Cert. Order 19–23.

22 Apple is also incorrect that accepting Pecht’s theory requires interpreting the AC/AC+
23 contract to lead to “absurd results” or write “equivalent to new out of the contract.” Pecht Mot.
24 12–13; Reply ISO Pecht Mot. (“Pecht Reply”) [Dkt. No. 283] 7–10. According to Apple, Pecht’s
25 opinion means that “[a] device that has experienced one extra degree of temperature change would
26 not be equivalent to new.” Decert. Mot. 13. It means “[a] brand-new device has experienced load
27 before it even has been put on a shelf, through its manufacture, assembly, testing, shipping, and
28 storage.” *Id.* The result is that “even two different new devices manufactured a week apart cannot

1 be “equivalent” to each other, because one has been on a shelf for a week longer, experiencing
2 load.” *Id.* But none of this has anything to do with contract interpretation; those “absurd results”
3 (the absurdity is debatable) are simply the results Apple derives *from Pecht’s analysis*. Whether
4 or how devices with de minimis loads violate the contract is not an issue requiring exclusion under
5 *Daubert*.

6 Apple argues that, under Pecht’s theory, devices can only be “new” and “not equivalent to
7 new”—and there is no such thing as a device that is “equivalent to new.” Pecht Reply 7–8.
8 Consequently, it says, Pecht’s opinion reads “equivalent to new” out of the contract. *Id.* I
9 previously rejected this argument. *See* Cert. Order 10. If it is true that a device with used parts
10 can never be equivalent to new—as the plaintiffs contend—then Apple simply made a contractual
11 promise that it cannot fulfill (and instead could fulfill with its alternative promise of new devices).

12 2. “Benign” Versus “Harmful” Loads

13 Apple next argues that Pecht’s theory does not “fit” the case because his opinion allows for
14 immaterial breaches that, at most, warrant nominal damages while the plaintiffs allege millions in
15 actual damages and a theory based on material breach. Pecht Mot. 13–14. As explained, Apple
16 claims that Pecht admitted in his deposition that some loads are “benign” or will result in only
17 “imperceptible” degradations to the devices. *Id.* According to Apple, at least some plaintiffs are,
18 therefore, not guaranteed to be appreciably harmed, so there is no material breach. *Id.* I address
19 this theory above as an issue of predominance. For the reasons explained there, Apple’s argument
20 misunderstands the plaintiffs’ theory of liability. And, as explained, the plaintiffs’ attempt to have
21 it both ways also cannot be squared with their theory. This is a merits issue.

22 ii. **Failure to Perform Physical Tests**

23 Apple’s second broad ground for exclusion is that Pecht’s opinions are not reliable under
24 *Daubert* because he “has not attempted any testing to support his speculation about the effects of
25 load conditions.” Pecht Mot. 16 (emphasis removed). It is true that Pecht did not physically test
26 any class devices. *See generally* Pecht Rep.; *see also* Pecht Oppo. 18. But his opinion is not the
27 type that requires specific testing in the case to be reliable, nor does the plaintiffs’ theory of injury
28 require it. *See Ramirez v. ITW Food Equip. Grp., LLC*, 686 F. App’x 435, 440 (9th Cir. 2017)

1 (“The reliability of an expert’s theory turns on whether it can be tested, not whether he has tested
2 it himself.”) (internal quotation marks, citation, and alteration omitted).

3 Pecht’s opinion comes from fundamental principles of reliability engineering that,
4 according to him, apply to components of any electronic device. *See Murray v. S. Route Mar. SA*,
5 870 F.3d 915, 924 (9th Cir. 2017) (holding that theories must be “grounded in science”). Those
6 principles, he and other experts in the case say, have been tested for decades and shown to be
7 accurate. Pecht Rep. 11–14. They have also been the subject of peer-review and publication. *Id.*
8 And Pecht’s opinions are falsifiable; indeed, one of Apple’s experts purports to put forward
9 evidence falsifying them. In other words, Pecht’s opinions have the usual hallmarks of reliability
10 that *Daubert* calls for. *See Primiano*, 598 F.3d at 565 (discussing factors).

11 *Daubert* does not *categorically* require physical experimentation on the subject devices for
12 an opinion to be reliable, depending on the type of opinion. *Ramirez*, 686 F. App’x at 440; *Banda*
13 *v. Herc Rentals, Inc.*, No. 18-CV-05329-JCS, 2020 WL 353461, at *9 (N.D. Cal. Jan. 21, 2020).
14 Pecht’s opinion is reliable because it follows from a scientific principle that all electronic devices
15 are strained by load. That principle—which is itself sufficiently reliable, falsifiable, and the
16 subject of past experiments—would apply to the class devices by their very nature.

17 **B. Motion to Exclude Bardwell**

18 Apple moves to exclude portions of the testimony of Dr. Robert Bardwell, the plaintiffs’
19 statistical expert, on two grounds. *See* Defendants’ Motion to Exclude Expert Testimony of
20 Robert A. Bardwell (“Bardwell Mot.”) [Dkt. No. 241]. The motion is DENIED.

21 Bardwell holds a Ph.D. in mathematics and has worked in statistics as a university
22 instructor, programmer, and consultant. *See* February 11, 2020, Supplemental Expert Report of
23 Robert A. Bardwell (“Bardwell Feb. Rep.”) [Dkt. No. 238-19] at 35. He has been retained as an
24 expert in many cases. *Id.* at 35–50. Apple does not dispute that he is qualified as a statistician.

25 Bardwell performed a statistical analysis of “device failures” for new versus
26 remanufactured devices under AC/AC+. *See id.* at 5; September 14, 2020, Supplemental Expert
27 Report of Robert A. Bardwell (“Bardwell Sep. Rep.”) [Dkt. No. 238-21] at 4. While he submitted
28 an initial report in February 2019, that report was based on data Apple had produced at the time;

1 since then, more data about the devices has been produced in discovery and Bardwell’s
2 supplemental reports—and this motion—focus on that. *See* Bardwell Feb. Rep. at 6.

3 To assess the devices’ failure rates, Bardwell uses “return rate” data. *See id.* at 5 (“In this
4 report, devices that are replaced by Apple due to performance issues are considered ‘failed’
5 devices.”); *id.* & n.1 (explaining that Apple treats “return rates” and “failure rates” the same). In
6 other words, consumers sometimes return devices to Apple under their AC/AC+ plans and Apple
7 replaces them. Bardwell treats each of these returns as the device “failing.” From this, he looks at
8 Apple’s internal data, which records whether the returned device was all-new or was
9 remanufactured. He purports to find the rate at which all-new and remanufactured devices are
10 likely to fail.

11 According to Bardwell, “[r]emanufactured devices fail earlier and more frequently than
12 new devices during the entire plan term.” *Id.* at 6. His finding that remanufactured devices are
13 more likely to fail, he says, is statistically significant, including after controlling for factors such
14 as memory or months from release data. *Id.* at 6–7. Further, the remanufactured devices had
15 shorter lifespans than new ones during the AC/AC+ period for each model: averages of 9.0 fewer
16 weeks for iPhones, 6.2 fewer weeks for iPads over those periods. *Id.* at 7. And during the first
17 four years of a device (that is, longer than the AC/AC+ period), he finds that remanufactured
18 iPhones last an average of six months less than new ones and iPads last an average of
19 approximately four months less than new ones. *Id.*

20 **i. Inability to Show Causation**

21 Apple first argues that Bardwell’s own data shows a “legally insufficient” risk of failure to
22 establish causation. *See* Bardwell Mot. 10–15. Its argument, however, rests on an attempt to
23 import the concept of “specific causation” from toxic tort cases. *Id.* 10–11. Apple asserts that
24 Bardwell’s opinion is only admissible if it aligns with that standard. *Id.* 11. It then goes further,
25 relying on a series of toxic tort cases that establish specific causation by measuring the increase in
26 “relative risk” through statistical evidence. *Id.* 12–13; *see In re Silicone Gel Breast Implants*
27 *Prod. Liab. Litig.*, 318 F. Supp. 2d 879, 892 (C.D. Cal. 2004); *In re Bextra & Celebrex Mktg.*
28 *Sales Practices & Prod. Liab. Litig.*, 524 F. Supp. 2d 1166, 1172 (N.D. Cal. 2007). In those cases,

1 experts sometimes reach a measure of the extent to which the chemical or drug increases the risk
2 of harm. Courts have sometimes (but not always) excluded relative risks of less than two—the
3 point at which the relative risk is doubled—because if the risk is less than doubled, it cannot show
4 proximate cause. *See, e.g., Silicone Gel*, 318 F. Supp. 2d at 892. Apple then translates Bardwell’s
5 failure statistics into relative risk statistics and finds that, for sixteen of the thirty-one types of
6 class devices, the relative risk is less than two. Bardwell Mot. 12–14; Reply ISO Bardwell Mot.
7 (“Bardwell Reply”) [Dkt. No. 284] 4–7.

8 At virtually every link in its chain of reasoning, Apple either misapplies the law,
9 misunderstands the plaintiffs’ theory of liability, or both. “Specific causation” is a term of art.
10 “Causation in toxic tort cases is typically discussed in terms of generic and specific causation.” *In*
11 *re Hanford Nuclear Rsrv. Litig.*, 292 F.3d 1124, 1133 (9th Cir. 2002). “General, or ‘generic’
12 causation has been defined by courts to mean whether the substance at issue had the capacity to
13 cause the harm alleged, while ‘individual causation’ [or ‘specific causation’] refers to whether a
14 particular individual suffers from a particular ailment as a result of exposure to a substance.” *Id.*
15 This framework has developed because of the difficulties inherent in determining whether drugs
16 “caused” human ailments that can occur without them.

17 Apple does not point to a single breach of contract case—or any similar theory based on
18 deprivation of the benefit of a bargain—that uses its proposed framework. This lack of authority
19 makes sense because the legally cognizable injury in a breach of contract case is entirely different
20 than in a toxic tort case. It is Apple’s argument, not Bardwell’s opinion, that does not “fit” the
21 case.

22 Unable to point to any breach of contract case that used this model, Apple mistakenly
23 relies on one case from the California Court of Appeal. The statement Apple cites is the accepted
24 proposition that, “[u]nder contract principles, the non-breaching party is entitled to recover only
25 those damages . . . which are ‘proximately caused’ by the specific breach.” *St. Paul Fire &*
26 *Marine Ins. Co. v. Am. Dynasty Surplus Lines Ins. Co.*, 101 Cal. App. 4th 1038, 1061 (2002); *see*
27 Bardwell Mot. 10–11 (citing *St. Paul Fire*). But there is no link between this statement and
28 “specific causation” in the toxic tort sense. Apple’s misapprehension appears to come from

1 latching onto the word “specific.” Neither *St. Paul Fire* nor any other case setting out general
2 principles of contract liability holds, states, or implies that the strictures of specific causation
3 apply to breach of contract claims.

4 *St. Paul Fire* made clear what it means by harm being caused by the specific breach: “Or,
5 to put it another way, the breaching party is only liable to place the non-breaching party in the
6 same position as if the specific breach had not occurred. Or, to phrase it still a third way, the
7 breaching party is only responsible to give the non-breaching party the benefit of the bargain to the
8 extent the specific breach deprived that party of its bargain.” *St. Paul Fire*, 101 Cal. App. 4th at
9 1061. It makes the unremarkable, inarguable, and essentially irrelevant point that the defendant’s
10 breach of the contract must cause the plaintiff’s harm.

11 Accordingly, Apple’s *Daubert* argument is based on a misapprehension of what a breach
12 of contract claim requires. Again, “[c]ontrary to Apple’s assertions, plaintiffs’ injury occurred
13 when they filed a claim under AC/AC+ and received a device that was not ‘equivalent to new in
14 performance and reliability’ because of load conditions or shorter lifespan. This injury occurred
15 regardless of whether an individual experienced problem with the device.” Cert. Order 19 (citing
16 *Nguyen v. Nissan N. Am., Inc.*, 932 F.3d 811, 819 (9th Cir. 2019)).⁹ When it comes to causation,
17 the plaintiffs will have to show what every breach-of-contract plaintiff must: that their alleged
18 harm (receiving an inferior device than bargained for) occurred “as a result of the breach.” *Miles*
19 *v. Deutsche Bank Nat’l Tr. Co.*, 236 Cal. App. 4th 394, 402 (2015); *see Nguyen*, 932 F.3d at 819.

20 And even if Apple had grist for its argument that these principles had some bearing here, it
21 still would not require excluding Bardwell’s testimony. In those toxic tort cases, an expert need
22 not meet the plaintiff’s entire causation burden alone if the expert evidence as a whole can do so.
23 *See Daubert v. Merrell Dow Pharm., Inc.*, 43 F.3d 1311, 1321 (9th Cir. 1995) (“A statistical study
24 showing a relative risk of less than two could be combined with other evidence to show it is more
25

26
27 ⁹ Apple seeks to get around my holding in a footnote, arguing that it was limited to the
28 predominance inquiry. *See Bardwell Mot.* 11 n.4. While it was in the context of predominance, I
was describing the nature of the plaintiffs’ alleged injury and theory of liability. Neither has
changed. Once again, Apple is reframing versions of its earlier, rejected arguments.

1 likely than not that the accused cause is responsible for a particular plaintiff's injury.”). Here,
 2 Bardwell’s evidence is merely supportive of Pecht’s opinions; the plaintiffs’ expert evidence *as a*
 3 *whole* would, if accepted by a jury, adequately support their theory.

4 **ii. “Return” and “Failure” Rates**

5 Apple’s second argument is narrow: it objects to Bardwell classifying “returns” as
 6 “failures.” *See* Bardwell Mot. 16–20. In its Reply, Apple clarifies that it “is arguing only that Dr.
 7 Bardwell should be barred from applying the *label* ‘failure’ to data that he acknowledges reflects
 8 device returns.” Bardwell Reply 9 (emphasis added and removed). Apple’s argument takes
 9 several forms: (1) that returns are, as a descriptive matter, not the same as failures and (2) that
 10 Bardwell is not qualified to analyze whether returns equate to failures because he is a statistician,
 11 not a reliability scientist. *Id.* 9–10; Bardwell Mot. 16–20. The plaintiffs counter that Bardwell is
 12 not offering an opinion on reliability science, he is treating returns as a proxy for failures.
 13 Bardwell Oppo. 9–13. They also contend that returns *are* an adequate proxy for failures and that
 14 Apple itself treats returns as failures. *Id.*

15 This is a matter for the jury. Bardwell will be permitted to present his analysis and Apple
 16 will be able to cross-examine him about, among other things, his choice to use return rates to
 17 derive failure rates—with all the limitations it believes that entails. *See* Fed. R. Evid. 705. A jury
 18 is capable of understanding that Bardwell used return rates as a proxy for failure rates, so Apple
 19 has not met its heavy burden for excluding the label as misleading. *See* Fed. R. Evid. 403.

20 Apple is also incorrect that Bardwell is rendering an opinion that must be grounded in
 21 reliability engineering or some other field outside of his ken. He simply treats one variable (return
 22 rates) as a proxy for another, related one (failure rates). Even if the two are not identical, the
 23 choice is reasonable because the record shows returns generally are likely to be due to failures and
 24 this was the data Apple provided. He does not opine that, *from an engineering perspective*,
 25 returning a device *guarantees* that it failed.

26 **C. Motion to Exclude Briant and Stark**

27 The plaintiffs move to exclude the testimony of Apple’s technical rebuttal expert, Dr. Paul
 28 Briant, and statistical expert, Dr. Philip Stark. *See* Plaintiffs’ Motion to Exclude Defendants’

1 Expert Paul L. Briant, Ph.D., and Motion to Exclude in Part Philip Stark, Ph.D. (“Briant Mot.”)
2 [Dkt. No. 247]. The motion is DENIED.

3 Briant holds a B.S., M.S., and Ph.D. in chemical engineering. *See* Expert Rebuttal Report
4 of Paul L. Briant, Ph.D., P.E. (“Briant Rep.”) [Dkt. No. 246-6] ¶ 2. For 12 years, he has been an
5 engineering consultant in the private sector. *Id.* ¶ 3. Among other things, he represents that he has
6 “extensive experience in mechanical testing and fatigue/reliability analysis of devices across many
7 industries, ranging from the automotive industry to medical devices to consumer electronics.” *Id.*
8 He has published various articles and book chapters related to engineering. *Id.* ¶ 5. The plaintiffs
9 do not challenge his qualifications to offer the opinions he does.

10 In this case, Briant conducted a laboratory study to assess performance and reliability of
11 iPhones. *Id.* ¶ 15. He studied new and remanufactured phones and put them through internal
12 performance tests, *id.* ¶¶ 21–24, and reliability stress tests, *id.* ¶¶ 25–29. Out of a pool of 60
13 iPhone SEs from Apple, he performed the tests on 14 new and 14 remanufactured phones. *Id.* ¶
14 15. According to him, his tests demonstrated that the iPhones “containing some new and some
15 recovered components had better performance overall than service units containing all new parts,
16 including higher average processor evaluation scores and fewer functional failures during the
17 testing.” *Id.* ¶ 16; *see id.* ¶ 33. Apple argues that this opinion tends to rebut Pecht’s theory.

18 **i. Reliability of Sample**

19 The plaintiffs contend that the sample of iPhone SEs that Briant used was not reliable
20 because he cannot show it was randomly selected or representative of what Apple would give to
21 consumers. *See* Briant Mot. 9–10. This does not require exclusion. Briant does not claim the
22 iPhone SEs were random or representative. Instead, he details that Apple provided him the units.
23 Briant Rep. ¶ 18. His lack of knowledge of whether they were randomized or representative—
24 indeed, how they were selected at all—is a matter for cross-examination. For his tests to be
25 helpful to the jury, they need not have been representative of all iPhone SEs, especially in light of
26 the plaintiffs’ broad theory of why the devices are inferior. That issue goes to weight.

27 **ii. Reliability of Stress Test Method**

28 The plaintiffs argue that there is not sufficient evidence that Briant’s stress testing methods

1 were reliable or reliably applied. *See* Briant Mot. 10–14. Briant performed three stress tests: an
2 “operational heat soak,” a “repeated drop,” and a “cyclic torsion” test. Briant Rep. ¶ 25. He
3 represents that these stress tests “covered three of the primary stress types (environmental, impact,
4 and mechanical loading)” that devices go through. *Id.*; *see also* ¶¶ 27–29 (describing each test).
5 The tests together, he says, “represent multiple years of consumer use.” *Id.* Briant has shown that
6 these tests are relatively standard in his field, and in any event are established to be useful in the
7 way he used them. As a result, the plaintiffs must rest on their argument that Briant “could not
8 cite any specific reasons for his choices [of test parameters].” Briant Mot. 11.

9 Why Briant may have chosen some particular testing parameter—for instance, the length
10 of the heat soak—is an issue for cross-examination. His showing that these types of tests are
11 standard in the field is sufficient to survive *Daubert*. The plaintiffs also contend that the testing is
12 less substantial than what Apple itself carries out. *Id.* That too is for cross-examination; there is
13 no reason an expert’s reliability testing must necessarily be benchmarked to a company’s to be
14 reliable. And the plaintiffs argue that their own rebuttal expert, Dasgupta, opines that the tests are
15 insufficient. *Id.* 12. But so long as *Briant’s* opinions are reliable, it does not matter what
16 countervailing evidence other experts introduce; that is a matter for the jury to weigh.

17 **iii. Reliability of Performance Test Method**

18 The plaintiffs argue that Briant’s *performance* testing—that is, how well the devices ran
19 before and after the stress tests—is unreliable. Briant Mot. 13–14. Briant used a software called
20 Geekbench to test the iPhones’ internal performance. Briant Rep. ¶¶ 21–24. The software was
21 installed on the devices so that tests could be run on each. *Id.*

22 The plaintiffs argue that Apple has not demonstrated Geekbench is reliable or was reliably
23 applied. The evidence is otherwise. A number of published scientific papers cited by Apple used
24 Geekbench as a standard tool to measure the performance of software. *See* Briant Oppo. 21
25 (collecting authorities). Because the application is available to anyone to use, it would be easy for
26 the plaintiffs to examine what it is testing for. Although the plaintiffs are correct that Briant could
27 not give much of a reasoned explanation for why he chose this tool over others, I find that, in this
28 context, he did not need to because the tool is for doing a relatively common and standard task that

1 is easily falsifiable: running a test to determine how well a computer or smartphone is performing.
 2 Nor is there, as the plaintiffs argue, an “analytical gap,” *Gen. Elec. Co. v. Joiner*, 522 U.S. 136,
 3 146 (1997), between the test and the results. Geekbench simply reported how well each device
 4 performed. And, because Geekbench has some acceptance in the field—and the plaintiffs have
 5 found no source indicating it is unreliable—it does not matter if Briant himself knows every detail
 6 of its technical specifications.

7 **iv. Whether the Results are Helpful to the Trier of Fact**

8 The plaintiffs assert that Briant’s opinions are not, as they must be, helpful to the trier of
 9 fact. Briant Mot. 14–15. Some of its reasons are duplicative of those just discussed and are to that
 10 extent rejected. The plaintiffs also argue that the tests were unhelpful because (1) they do not
 11 recreate the load conditions devices would experience in the real world, (2) were limited to one
 12 model in a small sample size, and (3) include potential “accidental damage,” which is not at issue
 13 for an AC/AC+ contract. All of these go to weight and the plaintiffs cite no specific authority that
 14 indicates otherwise. Those critiques are, to be sure, limitations of this study; but those limitations
 15 can be made plain to a jury. The study is reliable for what it purports to show: whether a group of
 16 iPhone SEs degraded under stress. All of this is particularly true given that the plaintiffs’ theory is
 17 so broad as to rope in *every* remanufactured device.

18 **v. Stark’s Opinions**

19 The plaintiffs argue that Stark’s opinions related to Briant’s should be excluded if Briant’s
 20 are. Alternatively, they argue that Stark’s opinions are unreliable on their own.

21 Stark is a professor of statistics at the University of California, Berkeley, who is also
 22 associated with mathematics, physical sciences, and computational data science and engineering in
 23 various capacities. *See* Expert Report of Prof. Philip Stark, Ph.D. (“Stark Rep.”) [Dkt. No. 246-8]
 24 ¶ 1. He has published over 170 articles and books, served on journal boards, and received various
 25 academic honors. *Id.* ¶ 2. He has served as an expert witness and assisted governmental agencies.
 26 *Id.* ¶¶ 3–6. The plaintiffs do not dispute that he is qualified as an expert in statistics.

27 While Stark’s report is largely concerned with rebutting Bardwell’s, that is not the focus of
 28 this motion. As relevant here, Stark had two roles. First, he designed the post-receipt

1 randomization of the iPhones that Briant tested. Second, he analyzed Briant’s results. *See id.* ¶
2 12, 19, 93–96. The plaintiffs move to exclude his testimony related to Briant on two grounds.

3 The plaintiffs first assert that Stark’s analysis of the propriety of a small sample size
4 (Briant’s was 14 of each type of device) is “faulty” enough to be unreliable. Briant Mot. 16. Its
5 argument is that Bardwell used Stark’s “own [statistical] program” and found that a sample size of
6 100 devices, not 10 as Stark says, is necessary to show statistical significance. *Id.* This is a battle
7 of the experts and goes to weight. Stark calculated his probability before the experiments;
8 Bardwell did after. Each can make their case to the jury.

9 Stark also left an iPhone that had relatively lower Geekbench scores than the others in his
10 analysis, which the plaintiffs argue is unjustifiably retaining an outlier. Briant Mot. 17. This is a
11 quintessential issue for the jury and is not that different from Bardwell’s choices. The plaintiffs
12 may cross-examine Stark about his rationale for including it.

13 **D. Motion to Exclude Rhinehart**

14 The plaintiffs move to exclude the testimony of Apple’s technical rebuttal expert, Dr. R.
15 Russell Rhinehart. *See* Plaintiffs’ Motion to Exclude Defendants’ Expert Russell Rhinehart
16 (“Rhinehart Mot.”) [Dkt. No. 249]. They argue that he is unqualified to render rebuttal opinions
17 to Pecht and that his opinions in response to Pecht and in support of Briant are unreliable on
18 various grounds. The motion is GRANTED.

19 Rhinehart holds a B.S. in chemical engineering, an M.S. in nuclear engineering, and a
20 Ph.D. in chemical engineering. Rebuttal Expert Report of R. Russell Rhinehart (“Rhinehart
21 Rep.”) [Dkt. No. 246-34] at 3–4. He has taught chemical engineering at universities for decades.
22 *Id.* at 4. Since 2016, he has worked as a consultant and “engineering coach” at a company he
23 founded. *Id.* He represents that his research has “focused on model validation, statistical methods
24 in process control, and product and process improvement,” including in “engineering
25 mathematical analysis (e.g. modeling, optimization, statistics, numerical methods, and regression)
26 and process control and automation techniques (e.g. classical, nonlinear, model-based, and steady-
27 state detection).” *Id.* He also worked in the private sector as a “process development engineer.”
28 *Id.* at 5. He also authored books and articles on, among other things, engineering statistics. *Id.*

1 As relevant here, Rhinehart offers three types of opinions: criticism of Pecht, criticism of
2 Bardwell, and support for Briant. Each is described in the pertinent section below.

3 **i. Opinions on Pecht’s Report**

4 The plaintiffs argue that Rhinehart is not qualified to render his opinions about Pecht’s
5 analysis because he lacks “the knowledge, experience, skill, education, or training to qualify as an
6 expert in the field of electrical and reliability engineering or to discuss how stress or load
7 conditions affect electronic components.” Rhinehart Mot. 9.

8 Rhinehart critiques Pecht’s opinion, which he calls the “load theory.” *See* Rhinehart Rep.
9 at 9. The core of his opinion is that “because Dr. Pecht has not proposed or conducted a designed
10 experiment or otherwise pointed to any data that supports his theory, his conclusions are no more
11 than speculation.” *Id.* Rhinehart says, “The best and most appropriate way to test Dr. Pecht’s
12 ‘load’ theory is through a designed experiment.” *Id.* at 10. An experiment would “test and
13 validate” Pecht’s opinions. *Id.* In the alternative, “Pecht could have attempted to test his theory
14 by conducting a retrospective study, which looks at all or a sample of historical data over time to
15 attempt to discover the relationships between two variables.” *Id.* at 11.

16 Rhinehart, the plaintiffs say, is an expert in chemical and nuclear engineering, but his
17 opinions in this case do not stem from that expertise. *See* Rhinehart Mot. 9–13. Apple responds
18 that (1) Rhinehart’s “opinions are grounded firmly in the basic engineering principles that he has
19 applied throughout his career,” not a specialized field he is not an expert in and (2) his opinions
20 are supported by engineering authorities. *See* Defendants’ Opposition to the Rhinehart Mot.
21 (“Rhinehart Oppo.”) [Dkt. No. 260] 11–15. While the second argument may be relevant to the
22 *reliability* of the opinions, it does not affect the analysis of whether Rhinehart is *qualified*.

23 Rhinehart is not qualified to offer the opinions he does about Pecht’s report. Both parties
24 agree that reliability engineering is a specific field with its own established principles. *See, e.g.,*
25 Decert. Mot. 7 (Apple hammering home the specialization required). In a statement that Apple
26 repeatedly relies on, one of the plaintiffs’ technical experts explained that the field brings together
27 other diverse areas of study such as physics, engineering, chemistry, and statistics to study how
28 devices degrade. Dasgupta Dep. 7:15–8:17, 9:15–21, 11:1–7. The field is also, the parties agree,

1 deeply related to electrical engineering. *See* Rhinehart Mot. 9; Rhinehart Oppo. 12. Rhinehart is
2 not and does not hold himself out to be an expert in reliability science or electrical engineering.
3 While he appears well qualified to opine on issues related to chemical engineering, even Apple
4 does not argue Pecht’s opinions are related to chemical engineering. He is not qualified under
5 standard *Daubert* principles. *Primiano*, 598 F.3d at 565 (holding that experts must “ha[ve] a
6 reliable basis in the knowledge and experience of the relevant discipline.”).

7 Apple first contends that Rhinehart need not be an expert in the “narrowly defined subfield
8 of electrical engineering.” Rhinehart Oppo. 12. Courts do not prevent experts from testifying
9 merely because, though otherwise qualified, they do not have expertise in some hyperspecialized
10 corner of their field that they are competent to testify in from their more general expertise. *See*,
11 *e.g.*, *Zeiger v. WellPet LLC*, No. 3:17-CV-04056-WHO, 2021 WL 756109, at *8 (N.D. Cal. Feb.
12 26, 2021). And the labels given to fields and subfields do not absolutely govern who may testify
13 about them. But, by the same token, slapping the label “engineering” on an expert or opinion is
14 insufficient to show expertise across that expansive field. *Cf. Shreve v. Sears, Roebuck & Co.*,
15 166 F. Supp. 2d 378, 392 (D. Md. 2001) (“[A]n expert who is a mechanical engineer is not
16 necessarily qualified to testify as an expert on any issue within the vast field of mechanical
17 engineering.”); *Ancho v. Pentek Corp.*, 157 F.3d 512, 519 (7th Cir. 1998) (“[A] mechanical
18 engineer . . . lacks qualifications to give expert testimony about plant reconfiguration Ancho
19 should have retained a qualified plant engineer.”). Rhinehart’s experience is insufficient to permit
20 him to testify about reliability science. *Cf. In re Ford Tailgate Litig.*, No. 11-CV-02953-RS, 2015
21 WL 7571772, at *6 (N.D. Cal. Nov. 25, 2015). None of Apple’s cases found expertise across
22 areas like the ones here.

23 Perhaps recognizing this, Apple also argues that Rhinehart is not even “purporting to opine
24 on principles specific to electrical engineering,” but instead on principles “common to both
25 reliability physics and chemical engineering.” Rhinehart Oppo. 12. This approach begs the
26 question and misses the point. The purpose of this inquiry is to determine whether *Rhinehart* has
27 the expertise necessary to present his opinions on reliability engineering to the jury. *Primiano*,
28 598 F.3d at 565. Simply declaring that principles in his field of established expertise are common

1 with principles in his field of questionable expertise is a conclusion in search of an expert.

2 It is also not sufficient, as Apple argues, that Rhinehart “states that theories require testing
3 to demonstrate whether they are true, particularly as applied to specific devices; that correlation is
4 not causation; and that small-sample-size experiments can be useful. These are principles that
5 underpin good science generally.” Rhinehart Oppo. 12. This masks what Rhinehart concludes.
6 He does not only make such general, high-level statements; he applies them to *Pecht’s* analysis on
7 the facts of this case. Rhinehart Rep. 9–11. More fundamentally, that an opinion is held out as
8 based on “good science generally” is not sufficient; *Daubert* requires experts to be qualified in the
9 pertinent field, not just that a principle be widely established (assuming this one is). There is no
10 reason why a general principle—no matter how reasonable or universally applicable it seems in
11 the abstract—would apply to or be helpful in analyzing every expert opinion. There may be
12 something about a particular field, for instance, that renders physical experimentation unhelpful.
13 Or there may be something about that particular opinion that does not require it. The point is, the
14 evidence on these questions is supplied by experts in the field, not from experts in other fields
15 talking about “good science generally.”

16 The closest Apple gets to showing that Rhinehart is qualified is its argument that one
17 chapter of a textbook Rhinehart wrote is about reliability. *See* Dkt. No. 263-2 at 8, 24:19–25. In
18 some circumstances that may be enough, but not here. Rhinehart’s textbook is on applied
19 engineering statistics. *Id.* at 25:1–16. Textbooks are written to educate students about subject
20 areas, including about concepts for which the author may not be an expert for *Daubert* purposes.
21 The issue again is that engineering is a particularly broad and diverse field and reliability science
22 (as Apple argues repeatedly) is its own peculiar beast. One textbook chapter does not mean that
23 Rhinehart has the expertise to offer the opinions that he does, which concern the technical aspects
24 of what a reliability scientist would need to show to validate a theory in that field.

25 Apple has not met its burden to show that a chemical (or nuclear) engineer has the
26 knowledge, training, skill, or experience to opine about reliability science without any other
27 expertise in that field merely because he is also a type of engineer. That does not change just
28

1 because it claims that the principles he opines about are common between his field and this one.¹⁰

2 **ii. Opinions on Bardwell’s Initial Report**

3 The plaintiffs argue that Rhinehart’s rebuttal opinions on Bardwell that only address his
4 initial report are irrelevant. Rhinehart Mot. 15–16. As discussed above, that initial report was
5 based on less complete data than the subsequent supplemental reports and which the plaintiffs
6 have not designated for use at trial. *Id.* Apple’s response appears to misinterpret the plaintiffs’
7 assertion. It appears to understand them as arguing that *all* of Rhinehart’s opinions on *all* of
8 Bardwell’s reports should be excluded on this basis. Rhinehart Oppo. 19. The confusion seems to
9 arise from the fact that Rhinehart omitted (Apple says as a “ministerial” mistake) citations to the
10 subsequent reports when he submitted his report. *Id.* The plaintiffs clarify in Reply that they do
11 not seek to exclude Rhinehart’s opinions on Bardwell’s *supplemental* reports on this basis.
12 Plaintiffs’ Reply ISO Rhinehart Mot. (“Rhinehart Reply”) [Dkt. No. 278] 12.

13 Because Bardwell will not be relying on the initial report at trial, Rhinehart cannot “rebut”
14 it. Apple offers no reason his testimony about it would be independently relevant. I exclude only
15 his testimony about the *initial* report on this basis, not about the two supplemental reports. When
16 the opinions are the same, Rhinehart is not barred (on this ground) from opining that the
17 supplemental reports erred.

18 **iii. Opinions on Bardwell’s Supplemental Reports**

19 The plaintiffs argue that Rhinehart’s opinions on Bardwell’s operative supplemental report
20 are unreliable because they are not based on sufficient facts and data or the result of reliable
21 principles and methods. Rhinehart Mot. 16–17. As relevant here, Rhinehart opined that “Dr.
22 Bardwell’s report seems strongly dependent on his choices of data rejection, group combining, and
23 data censoring.” Rhinehart Rep. ¶ 65. He also concluded that a cause-and-effect relationship
24 could not be derived from Bardwell’s data. *Id.* ¶ 66. There is no elaboration on the first statement
25 in his report, such as how those “choices” mattered, or even what they were. The plaintiffs attack
26 three aspects of Rhinehart’s opinion as unreliable; they argue that his deposition shows that they

27 _____
28 ¹⁰ Because Rhinehart is unqualified to offer opinions about Pecht’s analysis, there is no need to
address the plaintiffs’ alternative argument that those opinions are not reliable.

1 are based on insufficient facts and data or unreliable principles and methods.

2 First, the plaintiffs take issue with Rhinehart's statement that the report "seems strongly
3 dependent" on Bardwell's "group combining." Rhinehart Rep. ¶ 65. As Rhinehart's deposition
4 makes clear, he is referring to combining various iterations of iPhones or iPads into groups for
5 purposes of the data analysis. Deposition of R. Russell Rhinehart ("Rhinehart Dep.") [Dkt. No.
6 246-38] at 41:1-8. Bardwell's report explains that this combination is an artifact of the data he
7 was given: the same generation of device (*e.g.*, the iPhone 5c) is split into different names.
8 Bardwell Rep. at 9. He explains that the differently named devices are "reasonably described" as
9 the same device. *Id.*

10 Rhinehart's opinion conclusorily states that Bardwell's opinions "seem[] strongly
11 dependent" on the grouping. Rhinehart Rep. ¶ 65. That hazy statement has no elaboration or
12 explanation. His deposition shows that the statement is even less reliable. When asked what his
13 criticism on this ground was, the exchange was as follows:

14 A. So the question is, what is the criticism of gerrymandering? Gerrymandering is moving
15 voting boundaries around so that the -- the voting distributions make the outcome you want
16 more probable. And there is no legitimate, in my mind, evidence that Bardwell reports for
17 why he combined particular groups. If you combine particular groups, you can shape the
18 outcome, increase the -- anyway, you can shape the data. It's just a -- in general, a
19 dangerous thing for making universal strong claims about the data when the person doing
20 the analysis decides what data goes where and how it's going to be counted and how it
21 might have an impact on the bottom line results.

22 So I don't see that the -- that there's a justification for the regrouping -- the group
23 combining of the data. I don't see that there's a defense that says it didn't have any impact
24 on the statistics.

25 I see a vague statement that he combined some models because they were essentially the
26 same, in his opinion. But then he claims 94 models were condensed to 41, and that's a big
27 grouping in my opinion.

28 Q. Do you know whether, for example, this iPhone 5c, whether these two distinct models
that he has listed here are -- are different enough that they need to be separated?

A. ***I do not know that.*** I just see a danger. I see a classic potential for data manipulation
or misrepresentation because one person chooses how the data should be organized. ***And I
don't know that he's misrepresenting the data, but it's not defended.***

Q. Did you -- did you run this data with the models separated out and come to a different

1 conclusion than Dr. Bardwell?

2 A. I did not. I don't have the -- all the data.

3 Rhinehart Dep. 41:16–42:24 (emphasis added). It is incorrect that the choice of grouping is not
4 explained; Bardwell explains it I just described. More importantly, neither Rhinehart's report, his
5 deposition, nor even Apple's brief justifies how this opinion could be reliable. Rhinehart admitted
6 that he "d[id] not know" whether the iPhones were sufficiently different or similar to be grouped
7 together. If one does not know the facts or data underlying an opinion, that opinion is not "based
8 on sufficient facts or data." Fed. R. Evid. 702(b).

9 Second, Rhinehart opined that Bardwell treated devices that failed outside of the contract
10 period as failing at the end of that period. Rhinehart Dep. at 44:2–8. That is what he means by
11 "censored data" in his report. His statement that Bardwell's analysis "seems strongly dependent"
12 on this without explanation sets off reliability alarm bells. Rhinehart's deposition confirms that
13 his opinion is unreliable. After he stated the opinion above, counsel for the plaintiffs asked,
14 "[w]ell, isn't [Bardwell] actually just saying for those devices he can't tell when they failed? He
15 doesn't record the end of the contract date as a failure, does he?" *Id.* at 44:9–12. Rhinehart
16 responded, "*I'm not sure exactly what he does.* If he excludes that, then that means he gives
17 preference to the ones that failed earlier." *Id.* at 44:14–16 (emphasis added). And he was asked if
18 he had "any specific understanding of how Dr. Bardwell treated the censor [sic] data." *Id.* at
19 44:25–45:3. He replied, "[n]o, I do not." *Id.* at 45:3. He also could not say how or even whether
20 this affected the outcome. *Id.* at 45:20–23. These admissions contradict his statement from
21 moments before: in the first, he purported to critique what Bardwell did; in the second, he
22 admitted did not know what Bardwell did with those data points. Neither his report nor his
23 deposition nor Apple's brief lays out how this conclusory opinion is based on sufficient facts and
24 data—which Rhinehart seems to not actually know—or on reliable principles and methods.

25 Third, Rhinehart took issue with Bardwell's "data rejection." Once again, his report has no
26 elaboration beyond the conclusory assertion that Bardwell's analysis "seems strongly dependent"
27 on it. In his deposition, he first could not think of an example of Bardwell excluding data but was
28 able to after a break to review the report. Bardwell's report explains that the data Apple provided

1 for “some devices appear inconsistent.” Bardwell Rep. at 9. He excluded devices with
2 inconsistent data where (1) it showed multiple “original devices” for the same AC/AC+ contract,
3 (2) service contracts were outside of the usual contract window, and (3) devices had multiple
4 replacements. *Id.* Even in his deposition, Rhinehart could not explain why any of Bardwell’s
5 exclusion choices were questionable. He simply said they were “human judgment[s]” that “may
6 be defensible” but had “no clear explanation.” Rhinehart Dep. at 46:4–11. When counsel asked
7 him to explain specifically what he would do with one of those types of excluded data as an
8 example, he said “I -- I don’t know because I don’t see the data. I don’t know what it means.” *Id.*
9 at 46:20–21. Counsel asked, “[a]re you offering an opinion on whether those choices were
10 inappropriate in this case?” *Id.* at 47:6–7. Rhinehart replied that he was not, he was merely
11 pointing out that they were “human” decisions, necessarily involving judgment calls and done
12 without explanation. *Id.* at 47:8–15. Once again, he did not analyze whether it would make a
13 difference to Bardwell’s conclusions. *Id.* at 47:16–18.

14 For the same reasons previously described, this opinion is not based on any facts or data
15 underlying the report. At best for Apple, it is an expert making unsupported, nebulous assertions
16 of things that “seem to” weaken the report or that *might* be problems—but are never elaborated on.
17 Even if it were reliable under *Daubert*, I would exclude it under Rule 403.

18 Apple’s defense is thin. It does not address the opinions individually or address the
19 deposition testimony or Bardwell’s report in detail. Its defense boils down to the argument that
20 the plaintiffs attack the opinions’ correctness, not their reliability. Rhinehart Oppo. 20. As shown
21 above, that is not true. Apple argues that “[t]here is no requirement that a rebuttal expert read the
22 opening expert report cover to cover, and then write a rebuttal report outlining each and every
23 criticism of the opening expert’s opinions.” *Id.* (internal quotation marks and citations omitted).
24 That attacks a straw man. The issue is not that Rhinehart did not “outline each and every
25 criticism” he *could* have, it is that the criticisms he *actually makes* are unsupported and unreliable.

26 iv. Opinions in Support of Briant

27 Among other things, Rhinehart opines that “a reliably-done small sample size experiment,
28 *such as the reliability testing conducted by Dr. Briant*, could provide useful insight into the

1 relationship between two variables, especially in the absence of more robust testing.” Rhinehart
2 Rep. ¶ 70 (emphasis added). In his deposition, he admitted that he had “not seen the results” of
3 Briant’s testing. Rhinehart Dep. at 51:13–14. And he “can’t opine” on whether Briant’s testing
4 provides “useful insight.” *See id.* at 50:18–51:9.

5 Rhinehart cannot bolster Briant’s testing without ever having reviewed that testing. To be
6 sure, Rhinehart may opine—so long as it is otherwise relevant and admissible, which are not at
7 issue here—about small-scale studies generally. But he cannot opine that Briant’s particular study
8 is or is not reliable without knowledge of what occurred in the study. Apple replies that Rhinehart
9 only opines about small-scale studies generally, not Briant’s. Rhinehart Oppo. 21. As explained
10 above, that is factually incorrect; Rhinehart’s report explicitly applies his views to Briant’s study.
11 Nor is Apple saved by the principle that experts may rely on facts and data communicated to them
12 by others. *Id.*; *Southland Sod Farms v. Stover Seed Co.*, 108 F.3d 1134, 1142 (9th Cir. 1997).
13 The flaw in Rhinehart’s opinion is precisely that the underlying material was *not* communicated to
14 him and he did *not* review it.

15 Even if Rhinehart had reviewed Briant’s report and rendered opinions based on that, his
16 opinion is classic vouching. *See Huawei Techs., Co, Ltd v. Samsung Elecs. Co, Ltd.*, 340 F. Supp.
17 3d 934, 993–94 (N.D. Cal. 2018). This opinion is independently inadmissible on this basis.

18 **III. MOTIONS TO EXCLUDE DAMAGES EXPERTS**

19 **A. Motion to Exclude Gaskin and Weir**

20 Apple moves to exclude the opinions of the plaintiffs’ damages experts, Steven Gaskin and
21 Colin Weir. *See* Defendants’ Motion to Exclude Expert Testimony of Steven P. Gaskin and Colin
22 B. Weir (“Gaskin Mot.”) [Dkt. No. 243]. The motion is DENIED.

23 Gaskin executed two market research surveys that, he says, can “assess the difference in
24 market value” between new and remanufactured iPhones and iPads. Expert Report of Steven P.
25 Gaskin (“Gaskin Rep.”) [Dkt. No. 238-35] ¶ 9. According to him, “iPhones and iPads
26 experienced a reduction in market value, for the class during the class period, of 15.7% per
27 iPhone, and 14.1% per iPad, due solely to the fact that the devices were remanufactured, rather
28 than new, at the time and point of first purchase.” *Id.* ¶ 11. To analyze this, Gaskin performed a

1 choice-based conjoint analysis. “Similar analyses are often examined in the caselaw.” *Zeiger*,
2 2021 WL 756109, at *10 (collecting cases). They are now a “well-recognized economic method
3 used to study and quantify consumer preferences.” *In Re: MacBook Keyboard Litigation*, No.
4 5:18-CV-02813-EJD, 2021 WL 1250378, at *5 (N.D. Cal. Apr. 5, 2021). In a conjoint survey,
5 “[c]ustomers are shown sets of product profiles made up of varying features (“choice sets”) and
6 asked, as part of a series of ‘choice tasks,’ to indicate their preferred product profile among those
7 shown.” Gaskin Rep. ¶ 13. Then, from these randomized choice sets, a proper analysis can derive
8 the “partial contributions” of the tested features to the overall product utility. *Id.* ¶ 16. According
9 to Gaskin, the analysis can “simulate how choice shares would change in a market based on a
10 change in overall price,” and “determine the reduction in market value . . . due to the devices being
11 remanufactured.” *Id.* Weir then calculates the price premium for the entire class from this
12 difference.

13 **i. Failure to Analyze “Supply Side Factors” and “Market Realities”**

14 Apple’s first and most substantial argument is that Gaskin’s analysis cannot actually
15 determine the difference in “market value” because his analysis is based entirely on consumer
16 preferences—that is, the “demand side” of the transaction—and fails to take into account “supply
17 side” considerations. Gaskin Mot. 6–14. The plaintiffs respond that the survey adequately
18 captures market value and the supply side of the transaction because Gaskin and Weir rely on the
19 actual, historical prices of the products and quantities used during the relevant period. Plaintiffs’
20 Response to the Gaskin Mot. (“Gaskin Oppo.”) [Dkt. No. 269] 8.

21 There is currently a split among district courts in this District and elsewhere about whether
22 a conjoint analysis of change in consumer demand that uses actual, historical supply-side data is
23 admissible under *Daubert* or comports with substantive damages law. *Compare, e.g., Hadley v.*
24 *Kellogg Sales Co.*, 324 F. Supp. 3d 1084, 1106 (N.D. Cal. 2018); *In re MyFord Touch Consumer*
25 *Litig.*, 291 F. Supp. 3d 936, 969 (N.D. Cal. 2018); *Fitzhenry-Russell v. Dr. Pepper Snapple Grp.,*
26 *Inc.*, 326 F.R.D. 592, 606 (N.D. Cal. 2018); *In re Dial Complete Mktg. & Sales Practices Litig.*,
27 320 F.R.D. 326, 335 (D.N.H. 2017) (finding conjoints adequately captured market value), *with,*
28 *e.g., In re Volkswagen “Clean Diesel” Mktg., Sales Practices, & Prod. Liab. Litig.*, No. 3:17-CV-

1 4372-CRB, 2020 WL 6688912, at *7 (N.D. Cal. Nov. 12, 2020); *MacDougall v. Am. Honda*
 2 *Motor Co.*, 2020 WL 5583534, at *5 (C.D. Cal. Sept. 11, 2020); *In re Gen. Motors LLC Ignition*
 3 *Switch Litig.*, 407 F. Supp. 3d 212, 240 (S.D.N.Y.), *motion to certify appeal granted*, 427 F. Supp.
 4 3d 374 (S.D.N.Y. 2019) (finding conjoints did not adequately capture market value). I have
 5 rejected a challenge against a choice-based conjoint survey under *Daubert* based on its particular
 6 facts. *See Krommenhock v. Post Foods, LLC*, 334 F.R.D. 552, 576 (N.D. Cal. 2020).¹¹

7 The concern of the courts that have excluded models using real-world data is that they rely
 8 on an assumption about the supply curve: that it is constant despite the (alleged) change in
 9 demand. *See, e.g., Ignition Switch*, 407 F. Supp. 3d at 234. They argue that, if consumer
 10 willingness to pay changed because of the revelations about the products—which is what the
 11 conjoint analysis seeks to measure—then the supply-side of the equation would change too. *Clean*
 12 *Diesel*, 2020 WL 6688912, at *7. A company facing a loss in sales might, for example, lower its
 13 prices so that a large enough group of consumers would purchase the products. Or a company
 14 might cut back on supply. Using real-world data, Apple urges, is actually less accurate than
 15 hypothetical changed data because it keeps the supply curve static when it should move in
 16 response to demand. Gaskin Mot. 7–9. Consequently, to these courts, “presuming that
 17 Defendants would have sold the same number of [products], at the exact price that consumers
 18 would have been willing to pay, is not a way to reliably incorporate supply-side considerations.”
 19 *Clean Diesel*, 2020 WL 6688912, at *7. But, as the most carefully reasoned of the opinions taking
 20 this view has explained, even it believed “the issue is a close one.” *Ignition Switch*, 407 F. Supp.
 21 3d at 234.

22 I find that this damages model—a conjoint analysis using real-world supply-side data—
 23 satisfies *Daubert* and California law. The fundamental issue is this: does such an analysis reliably
 24 (as required by *Daubert*) reflect a product’s “reasonable market value” (as required by the law, *see*

25
 26 ¹¹ The split in this District is relatively one-sided in favor of allowing these analyses. The only
 27 case holding that these models are insufficient in this District that Apple points to is *Clean Diesel*.
 28 In addition to the substantive reasons I disagree with that court’s determination, *Clean Diesel* did
 not address the wealth of authority in this District, relying instead on just two district court
 decisions that held to the contrary. *See Clean Diesel*, 2020 WL 6688912, at *7–*8 (citing
MacDougal, 2020 WL 5583534, at *6, and *Ignition Switch*, 407 F. Supp. 3d at 239).

1 *Children’s Hosp. Cent. California v. Blue Cross of California*, 226 Cal. App. 4th 1260, 1274
2 (2014))? It does. Real-world price and quantity data is reliable for these purposes because, put
3 simply, it is what the supplier firm actually did. The new price that emerges—and the resulting
4 price premium—reliably captures what it set out to capture: a change in price as a result of a
5 change in consumer behavior. *See, e.g., Hadley*, 324 F. Supp. 3d at 1105. Apple is capable of
6 explaining and a jury is capable of understanding that the precise figure this model produces is
7 based on the assumption that supply would remain fixed. *See MyFord Touch*, 291 F. Supp. 3d at
8 970 (“The jury is entitled to weigh the credibility of [the expert’s] assumption, and [the defendant]
9 will have the opportunity to cross-examine him.”). Indeed, “[u]nder settled evidence law, an
10 expert may express an opinion that is based on facts that the expert assumes, but does not know, to
11 be true. It is then up to the party who calls the expert to introduce other evidence establishing the
12 facts assumed by the expert.” *Williams v. Illinois*, 567 U.S. 50, 57 (2012).

13 Damages calculations have long been understood to involve a degree of approximation;
14 because of the economic complexities of the real world, it could not be otherwise or recovery
15 could rarely be had. *See, e.g., Marsu, B.V. v. Walt Disney Co.*, 185 F.3d 932, 939 (9th Cir. 1999)
16 (“The fact that the amount of damage may not be susceptible of exact proof or may be uncertain,
17 contingent or difficult of ascertainment does not bar recovery.”) (internal quotation marks and
18 alteration omitted). California law reflects that principle. *California Lettuce Growers v. Union*
19 *Sugar Co.*, 45 Cal.2d 474, 487 (1955). To be sure, these models must be tethered to theories of
20 liability, fit the case, have a reliable basis, and avoid guesswork. But they will, as any economic
21 model inevitably will, simplify the world. *See Story Parchment Co. v. Paterson Parchment Paper*
22 *Co.*, 282 U.S. 555, 563 (1931) (“[W]hile the damages may not be determined by mere speculation
23 or guess, it will be enough if the evidence show the extent of the damages as a matter of just and
24 reasonable inference, although the result be only approximate.”); *Comcast Corp. v. Behrend*, 569
25 U.S. 27, 35 (2013) (citing this). One reasonable assumption—that can be cross-examined,
26 rebutted, and argued over—is the use of historical supply-side data.

27 Not only is this type of analysis admissible but adopting the competing approach risks
28 undermining *Daubert*. Apple’s challenge is more amorphous than its name suggests. There is no

1 set of considerations established to count as “supply-side factors” because any factor affecting the
 2 supply-side of the equation qualifies. That neat label obscures a messy reality. Indeed, Apple
 3 never lays out precisely what Gaskin could do to adequately capture market value; it just says he
 4 did not do it. But *Daubert* is about reliability. It is about preventing bad science from going to
 5 juries and exerting undue influence under the aegis of expertise. Taking Apple’s approach,
 6 experts would be required to perform a counterfactual analysis that disregards what happened in
 7 the real world and instead asks what hypothetically would have happened had demand changed.
 8 While finding a new equilibrium on a changed supply-and-demand graph in an Economics 101
 9 class might not be that difficult, Apple would have these experts take into account the myriad,
 10 unspecified “market realities” that can affect firms’ sales and consumers’ purchases. But because
 11 any number of factors can affect supply—and, for that matter, demand—experts would never
 12 know what new “market reality” a party would throw at them as missing. There is a risk that these
 13 motions become less about the fundamental reliability of evidence and more about the creativity of
 14 the opponents of that evidence identifying factors that could influence markets. This all would
 15 undermine, not be a faithful application of, the purpose of *Daubert*.¹²

16 Apple’s arguments about supply-side considerations and market realities are for rebuttal
 17 experts, cross-examination, and argument. The use of a methodologically sound conjoint and real-
 18 world historical supply data yields a sufficiently reliable result to go to the jury.

19 **ii. Allegedly Misleading “Condition” Attribute**

20 Apple contends that one of Gaskin’s “conditions” in the survey is too vague to result in a
 21 reliable response. Gaskin Mot. 15–17. The allegedly vague phrase is Gaskin’s prompt to
 22 consumers about devices “made with new parts and parts previously used in 1–2 other iPhones” or
 23 iPads and is “on average, more likely to fail sooner.” *Id.* 15. Apple argues that “sooner,” “on
 24 average,” and “fail” are all undefined. *Id.* 15–17. These arguments go to weight. An electronic
 25 device “fail[ing],” is self-explanatory. And “on average” means exactly what it says: it applies to
 26

27 _____
 28 ¹² Other courts have also noted the danger that concluding otherwise “might allow a defendant to profit in the real world by its wrongdoing (if proven) based on the notion that fewer people were harmed in the hypothetical world.” *MyFord Touch*, 291 F. Supp. 3d at 971.

1 the average device with used parts. While “sooner” is somewhat ill-defined, the plaintiffs’ theory
 2 of the case renders it appropriate. Apple promised devices “equivalent to new in reliability,” so a
 3 device that fails “sooner” (regardless of how much) is what is at issue.

4 **iii. Pretesting**

5 Gaskin conducted a “pretest” on twenty consumers to help ensure that the questions were
 6 not confusing or misleading. Apple takes issue with this pretesting because it was comprised of
 7 interviews that Apple seeks to call “free form conversations.” Apple’s entire support for this
 8 argument is *Clean Diesel*, which excluded a similar pretest Gaskin performed on this ground.

9 There is no evidence that an interview-based pretest is anything but usual and reliable.
 10 *Clean Diesel* itself cites no authority for its finding that a pretest is unreliable merely because it
 11 uses “free-form interviews.” *Clean Diesel*, 2020 WL 6688912, at *8. Nor does it explain what
 12 the pretest should have consisted of.¹³ Indeed, there is no authority before me (or in *Clean Diesel*)
 13 that a pretest is required to make a survey like this reliable in the first place—it seems to be
 14 regarded as a recommended plus-factor. See Shari S. Diamond, “Reference Guide on Survey
 15 Research,” REFERENCE MANUAL ON SCIENTIFIC EVIDENCE at 388 (3d ed. 2011). At most, *Clean*
 16 *Diesel* said conjoint surveys “usually” use them. It is unclear why the “informal[ity]” of the
 17 environment of a pretest like this should matter: the expert is engaged in trying to find out if
 18 consumers are misled and there is no evidence that discussion-based interviews cannot achieve
 19 that. Gaskin explains how and why he carried out the pretest and he opines that it followed
 20 standard procedure. Gaskin Rep. ¶ 29. Apple’s informality critique goes, if anywhere, to weight.

21 **iv. Measuring Price Premium Using “New” Devices**

22 Apple argues that the Gaskin/Weir model does not “fit” the case because it uses “new”
 23 devices as the comparator point for price even though the class members were promised devices
 24 that are “equivalent to new in performance and reliability.” Decert Mot. 20–21. Given that
 25

26
 27 ¹³ *MacDougall*, the sole case that *Clean Diesel* relies on for this, excluded a pretest for the entirely
 28 different and more serious reason that it found that the pretest survey did not adequately test the
 questions on the final survey. *MacDougall*, 2020 WL 5583534, at *7.

1 guarantee, Apple’s argument goes to weight. Because “new” devices were actually sold in the real
2 world, they are a reasonable stand-in for devices that are equivalent to new in those two crucial
3 aspects. Indeed, Apple identifies no characteristic of the device that would meaningfully alter the
4 value of a device. At bottom, use of an “equivalent” proxy is sufficient under *Daubert*. I already
5 found this measure adequate at class certification. *See* Cert. Order 23–24.

6 **B. Motion to Exclude Kaufman and Weir**

7 Apple moves to exclude or limit the testimony of two of the plaintiffs’ damages experts,
8 Dr. Lance Kaufman and Weir. *See* Defendants’ Motion to Exclude Expert Testimony of Lance D.
9 Kaufman and Colin B. Weir (“Kaufman Mot.”) [Dkt. No. 242]. The motion is DENIED.

10 Like Weir, Kaufman seeks to calculate the economic harm from Apple’s alleged breach of
11 contract. *See* Second Expert Report of Lance D. Kaufman (“Kaufman Rep. 2”) [Dkt. No. 268-2];
12 Third Expert Report of Lance D. Kaufman (“Kaufman Rep. 3”) [Dkt. No. 268-3]. He attempts to
13 measure the economic harm as the difference in value between new and remanufactured devices.
14 *See* Kaufman Rep. 2 at 5–6. Accordingly, he uses data from Apple’s “certified refurbished” sales
15 to calculate the harm. *Id.* at 10. He calculates how much Apple *sold* refurbished devices to
16 consumers for and uses that as a measure of the market value of remanufactured devices compared
17 to new.

18 **i. Windfall**

19 Apple argues that Kaufman’s model gives class members a windfall because it fails to
20 account for their “resale, exchanges, returns, or disposal.” Kaufman Mot. 11. According to
21 Apple, California law requires taking into account “post-sale conduct” when determining benefit-
22 of-the-bargain damages, which Kaufman ignores. *Id.* 11–13.

23 “[T]he measure of damages for breach of contract is the amount which will compensate the
24 party aggrieved for all the detriment proximately caused thereby, or which, in the ordinary course
25 of things, would be likely to result therefrom.” *Scheenstra v. California Dairies, Inc.*, 213 Cal.
26 App. 4th 370, 405 (2013) (internal quotation marks omitted). “Except as expressly provided by
27 statute, no person can recover a greater amount in damages for the breach of an obligation, than he
28 could have gained by the full performance thereof on both sides.” CAL. CIV. CODE § 3358. Under

1 a warranty claim, “[t]he measure of damages for breach of warranty is the difference at the time
2 and place of acceptance between the value of the goods accepted and the value they would have
3 had if they had been as warranted.” CAL. COM. CODE. § 2714(2).

4 The “benefit of the bargain” is “the difference between the actual value of what plaintiff
5 has received and that which he expected to receive.” *Overgaard v. Johnson*, 68 Cal. App. 3d 821,
6 823 (1977); accord Restatement (Second) of Contracts § 347 comm. a. The Ninth Circuit has
7 explained that a damages “calculation need *not* account for benefits received after purchase
8 because the focus is on the value of the service at the time of purchase.” *Pulaski & Middleman,*
9 *LLC v. Google, Inc.*, 802 F.3d 979, 989 (9th Cir. 2015) (emphasis added). Although that holding
10 concerned restitution under the UCL and FAL for an omission claim, the Ninth Circuit has since
11 applied that portion of *Pulaski* to a benefit of the bargain theory of damages. *Nguyen v. Nissan N.*
12 *Am., Inc.*, 932 F.3d 811, 820–21 (9th Cir. 2019). Apple’s argument that Kaufman calculation
13 contradicts the law’s requirements is therefore incorrect.

14 To contend otherwise, Apple relies primarily on *Ignition Switch*, discussed above. The
15 court there applied California (and other states’) law to a benefit of the bargain theory of damages.
16 *Ignition Switch*, 407 F. Supp. 3d at 220–26. The portion Apple cites is that court’s conclusion
17 that, under California law, “a plaintiff’s duty to avoid or mitigate damages means that post-sale
18 repairs are relevant to the calculation of benefit-of-the-bargain damages, even though such
19 damages are initially calculated according to the bargain that was struck at the time of sale.” *Id.* at
20 222–23. As a preliminary matter, *Ignition Switch* explicitly rejected *Pulaski*, which I am not at
21 liberty to do. *See id.* at 224 (“In reaching this conclusion, the Court is mindful of the Ninth
22 Circuit’s contrary conclusion [in *Pulaski*] that ‘UCL . . . restitution is based on what a purchaser
23 would have paid at the time of purchase had the purchaser received all the information.’”).
24 Moreover, this portion of *Ignition Switch* was discussing *mitigation of damages*. Mitigation of
25 damages is an affirmative defense. *Erler v. Five Points Motors*, 249 Cal. App. 2d 560, 561
26 (1967). Apple cites no authority for the proposition that an expert’s damages model is unreliable
27 under *Daubert* merely because it does not take into account that the defendant may argue an
28 affirmative defense that shows the plaintiffs are entitled to less than they claim.

1 **ii. The Relevant Market**

2 Apple contends that Kaufman’s use of Apple’s *retail* prices for refurbished devices *sold* to
3 consumers is an “irrelevant metric” because the relevant market is the one in which *consumers*
4 would *resell* their devices. Kaufman Mot. 16. I previously approved Kaufman’s model as
5 satisfying *Comcast Corp. v. Behrend*, 569 U.S. 27 (2013). Cert. Order 23. I also described the
6 use of the *retails* price of remanufactured devices as “reasonable.” *Id.* Apple offers no reason to
7 disturb those findings. As the law discussed above makes clear, a plaintiff is not damaged to the
8 tune of how much she could have sold her device for to someone else in a resale market, she is
9 damaged by the amount she paid for a device that she would not have paid had she known of its
10 problem. That Apple has a sales market in these remanufactured products likely means that
11 Kaufman has a *better* indicator of their value to consumers than in most cases where there is no
12 functioning market for the inferior or allegedly defective product.

13 **iii. Cost of Repair**

14 Apple argues that Kaufman failed to consider the costs of repair. According to Apple,
15 there is no cost of repair while AC/AC+ still applied, so those class members cannot show harm. It
16 relies on *Ignition Switch*, which held that benefit of the bargain damages are the lesser of the cost
17 of repair or difference in fair market value. *Ignition Switch*, 407 F. Supp. 3d at 217. (Its other
18 case involved cost of repair for negligent tortious conduct, which is a different species of damages.
19 *See Mozzetti v. City of Brisbane*, 67 Cal. App. 3d 565, 576 (1977).) As noted, *Ignition Switch*
20 explicitly departed from *Pulaski*’s instruction about when the damages are calculated. I cannot,
21 based solely on a single decision that intentionally rejected the most on-point Ninth Circuit case,
22 find that damages in a case like this are calculated by the cost of repair.

23 Further, AC/AC+ is an *alternative* contract. Apple was permitted to *either* repair or
24 replace the device. “The damages for breach of an alternative contract are determined in
25 accordance with that one of the alternatives that is chosen by the party having an election, or, in
26 case of breach without an election, in accordance with the alternative that will result in the
27 smallest recovery.” Restatement (First) of Contracts § 344 (1932). Apple elected to replace rather
28 than repair the devices; the plaintiffs alleged that, when it did so, it breached. The lack of cost-of-

1 repair damages does not render the opinions unreliable.

2 **iv. Limitation of Liability Provision**

3 Last, Apple briefly argues that the AC/AC+ contracts provide that, “To the maximum
4 extent permitted by applicable law, the limit of Apple and its employees and agent’s liability to
5 you and any subsequent owner arising under the plan shall not exceed the original price paid for
6 the plan.” Kaufman Mot. 18 (quoting AC/AC+ Plan). Because Kaufman does not limit damages
7 to this amount, Apple argues his opinions are predicated on legal error. The plaintiffs respond that
8 Apple was required to plead this as an affirmative defense.

9 I disagree with Apple. If that limitation provision is enforceable (and if Apple did not
10 waive it per the discussion below) and applicable here, the recovery can simply be diminished in
11 the usual course: either at the damages phase or by appropriate motion. That does not loosen the
12 Kaufman model’s “fit” to the case.

13 Plaintiffs argue that Apple should have raised this earlier and that it is prejudiced as a
14 result. Kaufman Oppo. 15–16. It appears that they are wrong that limitation on damages
15 provisions are affirmative defenses that must be pleaded. *See Patsystems (NA) LLC v. Trend*
16 *Exch., Inc.*, 695 F. App’x 206 (9th Cir. 2017). But if the plaintiffs contend that Apple had an
17 obligation to disclose this issue during discovery, they should move in limine to try to preclude it.

18 **C. Motion to Exclude Butler**

19 The plaintiffs move to exclude part of the testimony of one of Apple’s damages rebuttal
20 experts, Sarah Butler. *See* Plaintiffs’ Motion to Exclude in Part Defendants’ Expert Sarah Butler
21 (“Butler Mot.”) [Dkt. No. 248]. Butler offers rebuttal opinions to Gaskin and Weir. The plaintiffs
22 argue that she is not qualified to offer opinions about economics. The motion is GRANTED.

23 Butler holds a B.A. in sociology and history, an M.Phil., and an M.A. in sociology. *See*
24 Expert Report of Sarah Butler (“Butler Rep.”) [Dkt. No. 246-28] at 39. She was an adjunct
25 professor for several years before becoming a researcher and consultant. *Id.* at 39–40. She holds
26 herself out as an expert in “survey research, market research, sampling, and statistical analysis.”
27 *Id.* at 38. She has conducted survey research, market analysis, and analyzed topics like business
28 and consumer decision-making and behavior. *Id.* at 4. She is currently a managing director at an

1 economic consulting firm. *Id.* at 38. She has been retained as an expert in dozens of cases. *Id.* at
2 40–48. Her work has specifically included conjoint surveys. *Id.* at 5.

3 Butler replicated (with one change) Gaskin’s survey and critiques his methodology. *See*
4 *id.* at 6–10. The plaintiffs do not attack her qualifications to perform the survey or her criticisms
5 of Gaskin’s survey design. Instead, the plaintiffs argue that she is unqualified to opine “about
6 supply side and economics considerations.” Butler Mot. 1. *Those* opinions are largely about
7 Weir’s analysis of price premiums. *See* Butler Rep. ¶¶ 14, 54–56, 58. In particular, she opines
8 that Weir’s “approach is also not a proper reflection of damages in this matter as it does not
9 [among other things not challenged here] take into account supply side or marketplace
10 considerations.” *Id.* ¶ 14. She elaborates on why supply-side considerations must be taken into
11 account. *Id.* ¶¶ 54–56, 58.

12 Butler is not qualified to render the challenged opinion. While she may offer opinions
13 about flaws in the survey design, and though Apple tries to couch the opinion as pointing out
14 flaws in the survey, it is not. Boiled down, it is that a method for measuring consumer willingness
15 to pay is an inadequate measure of market price because it fails to account for changes in supply.
16 That opinion may be right, wrong, or debatable as a matter of economic theory, but it is a matter of
17 *economic theory*. Butler is not an economist nor does she purport to be. She has no training,
18 education, skill, or experience in economics, nor does she purport to. Apple cannot slide in
19 opinions within the ken of an economist under the guise of faulting the survey design.

20 Apple’s responses largely do not respond to these concerns. Mostly, it falls back to the
21 argument that Butler is merely bringing her experience in survey design to bear. *See* Defendants’
22 Opposition to the Butler Mot. (“Butler Oppo.”) [Dkt. No. 259] 10–12, 13–15. It also points out
23 that she briefly discussed these supply side drawbacks of conjoint surveys in a publication, but
24 that does not render her an expert on them under *Daubert*. And Apple argues that Butler does not
25 need a *degree* in survey design to opine about it. I agree: her experience in *that* field is sufficient
26 to make her an expert in it. But, as explained, this is not truly an opinion about the drawbacks of a
27
28

1 survey, it is entirely grounded in economics.¹⁴

2 **D. Motion to Exclude Simonson**

3 The plaintiffs move to exclude part of the testimony of one of Apple’s damages rebuttal
4 experts, Dr. Itamar Simonson. *See* Plaintiffs’ Motion to Exclude in Part Defendants’ Expert
5 Itamar Simonson (“Simonson Mot.”) [Dkt. No. 250]. Like Butler, Simonson offers rebuttal
6 opinions to Gaskin and Weir. The plaintiffs argue that, like Butler, he is not qualified to offer
7 opinions about economics. The motion is DENIED.

8 Simonson is a professor of marketing at Stanford University’s Graduate School of
9 Business. Rebuttal Expert Report of Dr. Itamar Simonson (“Simonson Rep.”) [Dkt. No. 250-2] ¶
10 1. He holds a B.A. in economics and political science, an MBA, and a Ph.D. in marketing. *Id.* ¶
11 2. He is an expert in “consumer behavior; marketing management; the role of price, brand, and
12 product features on consumer behavior; survey and experimental methods; and human judgment
13 and decision making.” *Id.* Most of his “research has focused on buyers’ purchasing behavior and
14 the effects of product characteristics . . . , the competitive context, and marketing activities . . . on
15 buying decisions.” *Id.* He has taught about, among other things, “buyer behavior, developing
16 marketing strategies, building brand equity, advertising, sales promotions, and retailing.” *Id.* ¶¶ 4–
17 5. He also taught a course in applied behavioral economics. *Id.* He has performed, supervised, or
18 evaluated over 2,000 market research studies, including conjoint surveys. *Id.* ¶ 7.

19 Simonson criticizes Gaskin’s survey. *See, e.g., id.* ¶¶ 12–13. As with Butler, the plaintiffs
20 do not challenge his critiques of the survey design or methodology. Their challenge is once again
21 to a discrete, economically grounded opinion: that Gaskin and Weir “failed to address the
22 competitive and market consequences of their alleged ‘reduction in market value’ theory.” *Id.* ¶
23 13. Like Butler, Simonson opines that the Weir/Gaskin analysis required analysis of “supply side
24 factors” but did not adequately analyze them. *Id.* ¶¶ 69, 72–74. He opines that Gaskin failed to
25

26
27 ¹⁴ Apple also argues that, if Butler is unqualified, Gaskin is also unqualified to opine that the
28 conjoint analysis shows an accurate market price. That issue is not before me. Based on my
ruling, Apple may move in limine to preclude Gaskin from so testifying if it believes that
challenge has merit.

United States District Court
Northern District of California

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28

account for how competitors would respond, and the effects on the price. *Id.*

Simonson is qualified. I reiterate my finding that such opinions must come from economic expertise, not survey design. But, unlike Butler, Simonson does have experience with these economic concepts in his work and teaching. As a business school professor, Simonson has significant teaching experience that includes how competitors and firms interact with consumer decisions. Additionally, he has at least some experience in behavioral economics; he need not be so hyperspecialized as to be, for instance, a macroeconomist who specializes in the interaction of supply and demand. The plaintiffs seek to separate out “supply side economics” from the rest of the field, but that level of specialization, again, is unnecessary given Simonson’s other experience.

IV. MOTIONS TO SEAL

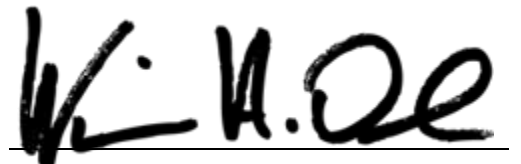
The parties have filed a set of motions to seal that I will rule on in a forthcoming order. Everything now under seal will remain that way until I rule. Several pieces of information that are redacted in the briefs are unredacted here because the movant did not meet the compelling-reasons standard. *See Ctr. for Auto Safety v. Chrysler Grp., LLC*, 809 F.3d 1092, 1096 (9th Cir. 2016).

CONCLUSION

The motion to decertify the class is DENIED. The *Daubert* motions are resolved as explained above.

IT IS SO ORDERED.

Dated: May 14, 2021



William H. Orrick
United States District Judge