

**IN THE UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF COLORADO  
Judge William J. Martínez**

Civil Action No. 15-cv-0518-WJM-NYW

DANIEL PERTILE, and  
GINGER PERTILE,

Plaintiffs,

v.

GENERAL MOTORS, LLC, a Delaware limited liability company,  
TRW VEHICLE SAFETY SYSTEMS, INC., a Delaware corporation,  
KELSEY-HAYES COMPANY, a Delaware corporation,

Defendants.

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**DAUBERT ORDER REGARDING PLAINTIFFS' EXPERT STEVEN LOUDON**

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This case arises out of a rollover accident in which Plaintiff Daniel Pertile was the front seat passenger in a Chevrolet Silverado pickup truck. (*See generally* ECF No. 31.) Mr. Pertile was badly injured, and in this action Plaintiffs bring suit against General Motors, LLC ("GM"), TRW Vehicle Safety Systems, Inc., and Kelsey-Hayes Company ("Kelsey-Hayes"), advancing claims for strict liability, negligence, breach of warranties, violation of the Colorado Consumer Protection Act, and loss of consortium.

Now before the Court are Defendant Kelsey-Hayes Company's Motion to Exclude Steve Loudon's ESC Opinions (ECF No. 198) and Defendant General Motors LLC's Motion to Exclude the Testimony of Steven Loudon (ECF No. 203). For the reasons explained below, both motions are granted in part.

## I. LEGAL STANDARD

A district court must act as a “gatekeeper” in admitting or excluding expert testimony. *Bitler v. A.O. Smith Corp.*, 400 F.3d 1227, 1232 (10th Cir. 2004). Admission of expert testimony is governed by Rule 702, which provides:

A witness who is qualified as an expert by knowledge, skill, experience, training, or education may testify in the form of an opinion or otherwise if: (a) the expert’s scientific, technical, or other specialized knowledge will help the trier of fact to understand the evidence or to determine a fact in issue; (b) the testimony is based on sufficient facts or data; (c) the testimony is the product of reliable principles and methods; and (d) the expert has reliably applied the principles and methods to the facts of the case.

Fed. R. Evid. 702. The proponent of the expert testimony bears the burden of proving the foundational requirements of Rule 702 by a preponderance of the evidence. *United States v. Nacchio*, 555 F.3d 1234, 1241 (10th Cir. 2009).

An expert’s proposed testimony also must be shown to be relevant and otherwise admissible. See *Adamscheck v. Am. Family Mut. Ins. Co.*, 818 F.3d 576, 588 n.7 (10th Cir. 2016). To be relevant, expert testimony must “logically advanc[e] a material aspect of the case” and be “sufficiently tied to the facts of the case that it will aid the jury in resolving a factual dispute.” *United States v. Garcia*, 635 F.3d 472, 476 (10th Cir. 2011) (brackets in original).

While an expert witness’s testimony must assist the jury to be deemed admissible, Fed. R. Evid. 702(a), it may not usurp the jury’s fact-finding function. See *Specht v. Jensen*, 853 F.2d 805, 808 (10th Cir. 1988). The line between what is helpful to the jury and what intrudes on the jury’s role as the finder of fact is not always clear,

but it is well-settled that “[a]n opinion is not objectionable just because it embraces an ultimate issue.” Fed. R. Evid. 704.

The trial court’s focus under Rule 702 is on the methodology employed by an expert, not on his or her conclusions. *Bitler*, 400 F.3d at 1233. Ultimately, “the rejection of expert testimony is the exception rather than the rule.” Fed. R. Evid. 702 advisory committee’s note. “[T]he trial court’s role as gatekeeper is not intended to serve as a replacement for the adversary system. . . . Vigorous cross-examination, presentation of contrary evidence, and careful instruction on the burden of proof are the traditional and appropriate means of attacking shaky but admissible evidence.” *Id.* (quoting *Daubert v. Merrell Dow Pharm., Inc.*, 509 U.S. 579, 595 (1993)). Nevertheless, when an expert’s conclusion “simply does not follow from the data, a district court is free to determine that an impermissible analytical gap exists between premises and conclusion.” *Bitler* 400 F.3d at 1233. The Court therefore may properly exclude expert testimony “that is connected to existing data only by the *ipse dixit* of the expert.” *Id.* at 1238 (quoting *General Elec. Co. v. Joiner*, 522 U.S. 136, 146 (1997)).

## II. BACKGROUND

Detailed background of this case has been set out in other orders and is not repeated here. In relevant summary, Plaintiff was the passenger in a Chevrolet Silverado 2500HD pickup truck (the “Vehicle”) during a single vehicle rollover on February 25, 2013 (the “Rollover,” or the “Crash”). Among other theories of liability, Plaintiffs claim that the Vehicle’s Electronic Stability Control (“ESC”) system was defective and therefore seek damages from both Kelsey-Hayes, which manufactured

the control module of the Vehicle's ESC system, and from GM, which manufactured the Vehicle. (See ECF No. 237 at 8.)

Pursuant to Federal Rule of Civil Procedure 26(a)(2) and Federal Rule of Evidence 702, Plaintiffs disclosed Mr. Steven Loudon to testify as an expert "in the field of Electronic Stability Control (ESC) Systems, including evaluation of designs and design alternatives, and design, development, testing and analysis of hardware and software that has been used in automobile control systems." (ECF No. 199-3 at 4.) As described by Mr. Loudon, ESC "functions to detect when the vehicle is beginning to skid or spin. It will then use the brake control system and the engine management system to correct the skid or spin, allowing the driver to regain control of the vehicle. ESC is the combination of ABS [anti-lock braking system], Traction Control ('TC') and Yaw Stability Control ('YSC') on the Electronic Brake Control Module ('EBCM') and is together referred to by GM as 'Stabilitrak.'" (ECF No. 198-6 at 10.)

Mr. Loudon opines that "Electronic Stability Control ('ESC') is a critical safety feature in any motor vehicle," and provides a lengthy exposition of how ESC systems work, and why he opines they are highly effective and beneficial, particularly in preventing incidents such as the Rollover here. (*Id.* at 10–20.) Regarding the Vehicle's ESC system in this case, he opines that "the performance of the system complies with the applicable standards" under federal regulations, that "[t]est reports and videos show the vehicle met all of GM's internal requirements," and that "the system was demonstrated to be capable of dealing with emergency evasive maneuvers if the systems [*sic*] is available and not in a fault state." (ECF No. 203-6 at 21.)

Mr. Loudon's report goes on to explain his opinion that the Vehicle in this case

“intermittently experienced ESC disabling faults including on the day of the accident.” (*Id.* at 22–36.) Mr. Loudon explains how, relying on the “diagnostics of the inputs and outputs of the system,” and on results from a vehicle inspection, he reviewed the recorded “faults or DTCs” stored in the vehicle’s ESC system after the Crash. (*Id.* at 22.) Mr. Loudon’s report reflects that 11 faults “were found stored in the EBCM [electronic brake control module] and extracted.” (*Id.* at 24.) He then walks through the recorded data regarding each of these 11 faults. (*Id.* at 24–32)

Mr. Loudon’s conclusion, in part, is that of the 11 total faults recorded, “four . . . were set after the accident, during the vehicle inspections,” and “three . . . were active during the ignition cycle of the accident—faults #1, #9, and #10. These faults inhibit the operation of the Electronic Stability Control (ESC) function of the Electronic Brake Control Module.” (*Id.* at 33.) He further concludes that “[t]here were at least 4 faults that had occurred sporadically in the ignition cycles prior to the accident,” of which “three . . . are faults of the steering wheel angle sensor (#5, #6, and #8) which is a primary input to the Electronic Stability Control system.” (*Id.*) Additionally, Mr. Loudon concludes that “of the faults that occurred during the . . . accident, Fault #1 . . . indicates that it had occurred 48 times since codes were last cleared. This shows that the diagnostic sub-function of the EBCM is intermittently detecting faults which in turn will turn the ESC light on during one ignition cycle and then it would be off in following ignition cycles. When this happens on a regular basis, a driver will begin to ignore the warnings.” (*Id.* at 34.) He explains that “[t]he steering sensor appears to be particularly unreliable,” given that 4 of the 11 total faults are related to the same sensor, and these

occurred “between the ignition cycle . . . of the accident[] and 58 ignition cycles prior to the last vehicle inspection.” (Id.)<sup>1</sup>

Given this analysis, Mr. Loudon concludes that the Vehicle had a “history of random intermittent faults” that would have disabled the ESC system, including at the time of the accident:

[T]his vehicle has a history of random intermittent faults that directly affect the functioning of the [ESC] system. It is my opinion that the ESC light was intermittently and randomly turning on and disabling the ESC function. Further, it is my opinion that the three faults, #1, #9, and #10 [were] active in the ignition cycle of the accident and prevented the ESC system from being available to the driver when he needed to make an evasive maneuver.

(*Id.* at 34.) Mr. Loudon therefore opines that “the ESC system’s availability had become unreliable,” that “[w]ith all these [fault] codes, causing lights to come on intermittently, it is no wonder that the driver began ignoring the warnings,” and that the driver “would not have noticed the fact that the system was disabled. (*Id.* at 24–35.) He further opines that the dashboard warnings provided by the ESC system in this Vehicle were “inadequate to convey that there is a safety problem with the vehicle.” (*Id.* at 35.)

Further, the parties do not dispute, for present purposes, that the Vehicle’s ESC system was in fact disabled at the time of the Crash in this case. Mr. Loudon therefore addresses the lack of functioning ESC as a cause of the accident in this case, opining that “[i]f the ESC function had been available. . . . it would have aided the driver in

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<sup>1</sup> The underlying factual record regarding the fault data is not materially disputed—at least not as relevant to Defendants’ present motions—although the parties dispute what opinions may be drawn from those facts. (*See generally* ECF No.203 at 5–6; ECF No. 232 at 7–8.)

regaining control of [the] vehicle and the accident would have been avoided” (*id.* at 34), that “[i]f the driver had the benefit of a functioning ESC system, the driver would not have lost control” (*id.* at 35), and that “with a functioning ESC system . . . [the] rollover would have been prevented” (*id.* at 36).

In summary, Mr. Loudon opines: (1) that the “loss of ESC in operation of the 2011 Chevrolet Silverado 2500HD is a serious safety defect” (*id.* at 20); (2) that “[t]he ESC system as designed and manufactured is defective and unreasonably dangerous. [It] . . . has excessive and intermittent faults which would disable the ESC system. Without functioning ESC there is a much greater risk of loss of control and rollover” (*id.* at 35); and (3) that “GM and Kelsey-Hayes should have designed and tested the system and sensors to be more reliable. The system should have included sensors that are resistant to intermittent failures which will disable the system” (*id.* at 36).

### III. ANALYSIS

Defendants do not challenge Mr. Loudon’s credentials or qualifications, which the Court therefore does not address. Defendants also do not challenge the admissibility of Mr. Loudon’s opinions regarding the effectiveness of ESC systems in general, his conclusion that the ESC system in the Vehicle in this case complied with applicable federal standards, or his opinions that a driver would have ignored the system’s warning lights after they illuminated intermittently over some period of time. (*See generally id.* at 10–20, 34–35.) The Court only addresses, in turn, those portions of Mr. Loudon’s opinions which Defendants seek to exclude.<sup>2</sup>

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<sup>2</sup> Although any objection under Rule 702 not timely raised in the present motions has been waived, this Order does not attempt to address the admissibility of every statement in

## A. “Diagnostic Strategy” Opinions

Kelsey-Hayes seeks to exclude Mr. Loudon’s opinions regarding a defect in the “diagnostic strategy” of the ESC system. It points to the following deposition testimony from Mr. Loudon:

Q. Now, why do you think that the vehicle had intermittent faults?

A. Because the—it either had a sensor problem or *if the diagnostic strategy was not well conceived.*

(ECF No. 198-4 at 19 (emphasis added).)<sup>3</sup> Kelsey-Hayes argues, first, that this opinion was not timely disclosed and is therefore inadmissible pursuant to Federal Rule of Civil Procedure 37(c)(1). (ECF No. 198 at 9.) Second, Kelsey-Hayes argues that any opinion that the Vehicle’s ESC system had defects in its “diagnostic strategy” is unsupported by the available data and is therefore inadmissible under Federal Rule of Evidence 702. (*Id.* at 9–10.)

In response, Plaintiffs point to language in Mr. Loudon’s report explaining that GM provided a document with a “diagnostic communication protocol,” which “defines the communication mechanism that is utilized by the dealer to ‘talk’ to the EBCM.” (ECF No. 203-6 at 22; *see also* ECF No. 230 at 9.) This portion of Mr. Loudon’s report

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Mr. Loudon’s written report on grounds *other than* Rule 702. Portions of his work are clearly boilerplate recycled (sometimes sloppily) from other litigation against GM. For example, Mr. Loudon’s report includes the statement that “if ESC had been included or operable on the GM Vehicles, many of the incidents, injuries and deaths that have occurred as a result of the ignition switch defect could have been prevented.” (ECF No. 203-5 at 10.) Any testimony consistent with that statement would of course be inadmissible as irrelevant in this case.

<sup>3</sup> All citations to docketed materials are to page number in the CM/ECF header, which does not always correspond to internal pagination, as is true with transcript excerpts.



appears to describe the communication protocol used to read the stored faults from the EBCM after the Crash, not a “diagnostics strategy” pertaining to how faults were communicated from the sensors to the EBCM during operations. In any event, if Mr. Loudon has some opinion regarding “diagnostics strategy,” this portion of his report does not say what it is. Plaintiffs argue, however, that Kelsey-Hayes “cannot claim unfair surprise,” given Mr. Loudon’s overarching criticism that the ESC system was repeatedly and intermittently shut down as a result of recorded faults, and that the system was therefore “defective and unreasonably dangerous.” (See ECF No. 230 at 10.)

However, to the extent Plaintiffs characterize Mr. Loudon’s overarching opinions as a criticism of a “diagnostics strategy,” or a “known diagnostic problem” (*see id.*), Plaintiffs do not point to any disclosed opinion from Mr. Loudon that identifies any particular way in which the “diagnostics strategy” was ill-conceived, or what alleged defect it contained. To the contrary, Mr. Loudon acknowledges that he has no way of knowing the conditions that caused the reported faults in the steering angle sensor (ECF No. 203-8 at 28), and he does not claim that these faults were incorrectly recorded. (See ECF No. 230-2 at 11.)<sup>4</sup> In fact, he testified that the “likely cause” of the detected fault from the steering wheel sensor was “[b]ecause there was a failure in the sensors.” (ECF No. 203-8 at 15.) Significantly, he also agrees that the appropriate

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<sup>4</sup> Certain of the recorded faults were faults in communications between the sensors and the EBCM. (See ECF No. 198-4 at 17–19.) However, Mr. Loudon testified that he could not establish that these occurred before the Crash, and they may have occurred because of the Crash. Moreover, Plaintiffs now state that “Mr Loudon agrees that Fault No. 1”—related to the steering wheel angle sensor—“is the only one that is pertinent to his opinions.” (ECF No. 232 at 8.)

response to a diagnosed faulty sensor or communications fault was for the ESC system to disable itself, “if it is based on a sensor that is a fundamental part of the ESC system,” such as the steering wheel angle sensor, “[b]ecause if [the ESC system] doesn’t know what’s going on, it can’t make correct adjustments.” (See ECF No. 198-4 at 19.) Given these positions, Mr. Loudon provides no explanation of what defect he claims was present in the ESC system’s “diagnostic strategy.”

Plaintiffs thus fail to identify either any particular opinion disclosed by Mr. Loudon regarding the “diagnostics strategy,” or what data and methodology would reliably underlie any such opinion to make it admissible under Rule 702. To the contrary, the Court finds that the logic of any claim that the “diagnostic strategy” was defective is not supported by Mr. Loudon’s premises, given his agreement that the “likely” cause of the faults was a sensor failure, and that the appropriate response to such a diagnosed faulty sensor was for the system to be disabled. Therefore, to the extent Plaintiffs seek to elicit an opinion from Mr. Loudon that the ESC system’s “diagnostic strategy” was defective, the Court finds Plaintiffs have not carried their burden of showing such an opinion would be admissible under Rule 702. Rather, such an opinion would appear to be no more than an *ipse dixit* conclusion by Mr. Loudon, and the Court finds there is an impermissible “analytical gap” between the facts reviewed by Mr. Loudon and any opinion regarding the “diagnostic strategy.” See *Bitler*, 400 F.3d at 1233.

The argumentative claims advanced by Plaintiff’s counsel in their present briefing also fail to carry Plaintiffs’ burden of showing the admissibility of such an opinion. Plaintiffs argue that the “control module can accurately record relevant fault codes and still maintain a defective diagnostic strategy,” that Kelsey-Hayes “was willing to turn a

blind eye to repeated faults,” and that Kelsey-Hayes’s “attempt to disavow a known diagnostic problem does not dissolve [*sic*] it of responsibility.” (ECF No. 230 at 10.) Plaintiffs neither point to anywhere Mr. Loudon actually disclosed such opinions, nor explain how testimony to that effect would be grounded in reliable facts and methods. Thus, even assuming, *arguendo*, that Mr. Loudon’s opinion regarding “diagnostic strategy” was timely disclosed, or that its untimeliness was harmless or justified, see Fed. R. Civ. P. 37(c)(1)(a), Plaintiffs have not shown that any opinion he holds regarding a defect in the “diagnostic strategy” is admissible under Rule 702.

Accordingly, Kelsey-Hayes’s Motion is GRANTED IN PART to exclude any testimony from Mr. Loudon claiming a defect in the ESC system’s “diagnostic strategy” was responsible for disabling the ESC system or causing the Crash.

#### **B. Inadequate Testing Opinion**

Kelsey-Hayes also seeks to exclude Mr. Loudon’s opinion that “Kelsey-Hayes should have designed and tested the [ESC] system and sensors to be more reliable.” (See ECF No. 198 at 10–11; ECF No. 203-7 at 36.) GM does not join in this argument, and the Court therefore finds it moot, given the Court’s order entered contemporaneously with this Order, granting Kelsey-Hayes’s Motion for Summary Judgment.

#### **C Opinion Regarding Excessive Faults and Ultimate System Defect**

GM moves to exclude Mr. Loudon’s opinion “that the . . . ESC system is defective due to excessive, intermittent disabling faults.” (ECF No. 203 at 7.) GM argues this opinion is not supported by the data and facts. (*Id.* at 4–7.) GM therefore

seeks an order precluding Mr. Loudon from opining that “the subject vehicle was defective because its ESC system was not operational when the crash occurred,” and his opinion that “the ESC system suffered from excessive disabling codes.” (*Id.* at 12.)

GM argues specifically that of the 11 recorded faults in the Vehicle’s ESC system after the Rollover, the only ones that could be shown to have disabled the ESC system at the time of the Crash are faults #1, #5, #6, and #8, all of which relate to the Vehicle’s steering wheel angle sensor. (See ECF No. 203 at 6; ECF No. 203-8 at 28.) These facts are not materially disputed, and Plaintiffs concede that “Mr. Loudon agrees that Fault No. 1 is the only one that is pertinent to his opinions,” although Plaintiffs’ argue that because that fault occurred “at least 48 times prior to the accident—each time disabling the [ESC] system,” Mr. Loudon should be permitted to opine that the ESC system suffered excessive faults and was thereby defective. (ECF No. 232 at 8.)

As reviewed in Part III.A., *supra*, however, Mr. Loudon’s review of the facts led him to conclude that the “likely” cause of the ESC system being disabled was a faulty sensor (ECF No. 203-8 at 15), and that the appropriate response to a diagnosed faulty sensor was for the system to be disabled. (See ECF No. 198-4 at 19.) Moreover, Mr. Loudon testified that he does *not* opine that any vehicle without an active ESC system active is defective. (ECF No. 203-8 at 30.) Rather, he opines that in this case, “this vehicle was designed with the system[,] [a]nd the loss of that system makes it defective and unreasonably dangerous,” though without explaining how that opinion reconciles with the view that it was appropriate for the system to be disabled given diagnosis of a faulty sensor. (See *id.*) He also does not dispute that the ESC system communicated

the disabling faults to the driver when those faults were active, by way of a dashboard indicator or warning light. (See ECF No. 203-8 at 31.)

Given these uncontested points, GM argues that “[t]he data downloaded from the ESC system does not show a pattern of excessive codes which prevented users from having reliable information about when ESC was working.” (ECF No. 203 at 7.) Rather, GM argues, the available information shows that “users received regular warnings that the ESC system was not working, and the diagnostic codes showed the reason was a problem with the steering wheel angle sensor.” (*Id.*) Thus, GM argues that there an impermissible “analytical gap” between the data reviewed by Mr. Loudon and his conclusion that the faults reported were “excessive” and thereby reflect a defective ESC system. (ECF No. 203 at 7.)

Plaintiffs respond that because all parties agree ESC is an important safety system, because the system here reflected a number of faults, and because the ESC system was disabled at the time of the accident, Mr. Loudon should be permitted to testify that the Vehicle’s ESC system was defective and unreasonably dangerous and that the number of recorded faults was excessive. (See *generally* ECF No. 232 at 4–8.)

The Court concludes that Plaintiffs have not met their burden of showing that Mr. Loudon’s opinions that the Vehicle’s ESC system was defective as a result of “excessive” faults or that or that “[t]he ESC system as designed and manufactured is defective and unreasonably dangerous” are admissible under Rule 702. (ECF No. 198-6 at 35.) Given Mr. Loudon’s agreement that a faulty sensor was the likely reason the ESC system was disabled and that the appropriate response to a faulty sensor was to disable the system, the Court finds there is an “analytical gap” between Mr. Loudon’s

review of the data and his opinion that the fact the system was disabled constitutes a design defect. See *Bitler*, 400 F.3d at 1233.

Plaintiffs' counter-arguments contest whether the number of faults can be characterized as "excessive," but the issue is neither quantitative as to the number or timing of recorded faults, nor semantic. No party really disputes the factual explanation of the faults present in the system and their history. The Court does not read Defendants' Motion as seeking to exclude Mr. Loudon from offering a narrative of the fault data. However, Plaintiffs have failed to establish that these data provide a reliable grounds for him to opine that the number of faults was "excessive," meaning that the system should not have recorded those faults, given the conceded fact that the likely explanation was, in fact, a faulty sensor. Likewise, Plaintiffs have not shown that Mr. Loudon has any method other than his own *ipse dixit* for opining that the ESC system was defective, given his agreement that it was appropriate for the system to be disabled in response to a diagnosed faulty sensor, since he does not opine that the absence of a functioning ESC system is a *per se* defect.

The Court therefore finds that while Mr. Loudon's explanation of the facts related to the faults recorded in the ESC system is admissible, an impermissible analytical gap exists between those facts and his ultimate opinions that the number of faults was "excessive" or that the ESC system was defective as a result, and thus those ultimate opinions are inadmissible under Rule 702.<sup>5</sup>

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<sup>5</sup> It is true, generically speaking, that a product may be found to be defective in its design, even if it is manufactured and performs exactly as expected, if aspects of the product's design make it unreasonably dangerous. See *Armentrout v. FMC Corp.*, 842 P.2d 175, 187 (Colo. 1992); accord Colorado Jury Instructions, 4th-Civil § 14:3 (June 2017 update). That may

Moreover, neither Plaintiffs nor Mr. Loudon himself have explained what methodology or standard he used to conclude that the number of faults was “excessive,” or that the system was defective and unreasonably dangerous. And, since Plaintiffs have not established that Mr. Loudon’s opinions on these points are grounded in any technical expertise or methodology other than his own conclusory opinion, the Court finds that his opinions on these ultimate questions would be unhelpful to the jury and would unduly intrude on the jury’s own fact-finding role. The jury will answer whether they find any aspect of the Vehicle or its components was defective, and will need to resolve the parties’ arguments as to whether the evidence regarding how and why the ESC system was disabled establishes that the system was unreasonably dangerous or otherwise defective. Unlike his explanation of how the system works and what the fault codes reveal, which arise from his technical knowledge and will assist the jury, Mr. Loudon’s own *ipse dixit* opinions on the ultimate question of defect is not grounded either in methods or in expertise that are beyond the jury’s own ability to comprehend. Thus his ultimate opinions on these points would not assist the jury and are inadmissible under Rule 702(a). *See Garcia*, 635 F.3d at 476–77 (“In assessing whether testimony will assist the trier of fact, district courts consider several factors, including whether the testimony is within the juror’s common knowledge and experience.” (internal quotation marks omitted)).

Accordingly, Defendants’ Motions are GRANTED IN PART to the extent that Mr.

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well be the thrust of Plaintiff’s argument, but that general statement regarding liability does not relieve Plaintiffs of the evidentiary prerequisites of Rule 702 for Mr. Loudon to offer an expert opinion on the ultimate issue of defect.

Loudon may explain his review of the ESC system's fault codes and what they reveal about how and why the ESC system was disabled at the time of the accident, but he is EXCLUDED from opining that the number of faults was "excessive" or that the ESC system was unreasonably dangerous or defective as a result.

#### **D. Causation Opinions**

Both GM and Kelsey-Hayes move to exclude Mr. Loudon's opinion that a functioning ESC system would have prevented the Crash, on the grounds that he lacks a reliable basis or methodology for that opinion. (See ECF No. 198 at 7–8; ECF No. 203 at 7–12.) Mr. Loudon's report contains repeated and emphatic statements of his opinion that a functioning ESC system would, definitively, have prevented the Crash. (See ECF No. 198-8 at 34–36.) However, the only explanation that Mr. Loudon's report provides to support these emphatic opinions is:

Based on review of the GM requirements on high coefficient surfaces, the maximum allowed slip angle in a double lane change is 10 degrees. The accident vehicle's maneuver was similar to a double lane change. However, the slip angle was much greater than 10 degrees during the on-road travel.

(ECF No. 203-7 at 35.)

When questioned in his deposition, Mr. Loudon provided even less explanation of how he reached the conclusion that ESC would, *definitively*, have prevented the Rollover. (See *generally* ECF No. 203-8 at 8–13.) When pressed to explain how quickly the ESC system would have slowed the dynamics that led to the Rollover, Mr. Loudon opined only that the system would have acted "as fast as necessary to try to bring the car back to the expected trajectory." (*Id.* at 9.) He opined that the action



would have been “sufficient . . . . to keep the steer angle or slip angle . . . less than ten percent,” and that there was “sufficient” space available to do this, but could not identify how much room there actually was, or how he concluded that it was “sufficient.” (*Id.* at 10.) Moreover, while he acknowledged the Vehicle would have had “reduced grip” because of snow, he opined that the ESC system’s corrective braking would still have had a “significant” effect, but he defines “significant” as meaning only “enough to make a difference.” (See ECF No. 203-8 at 8–11; ECF No. 203 at 9–10.) He did not identify either any calculations of his own, or any testing, research, or documentation supporting his conclusions, except to assert that he had done “testing in a subjective evaluation standpoint.” (See ECF No. 203-8 at 10–11.)

The Court finds this explanation for Mr. Loudon’s causation opinions to be conclusory, and ultimately circular, and therefore insufficient under *Daubert* and Rule 702. In effect, Mr. Loudon opines that the ESC system would have prevented the Crash because it would have had a “significant” or “sufficient” effect, but he defines those terms only to mean the system would have done enough to prevent the Crash. This explanation leaves far too great an “analytical gap” between the proffered methodology and Mr. Loudon’s ultimate opinion. See *Bitler*, 400 F.3d at 1233.

The only somewhat analytical explanation offered by Mr. Loudon for his causation opinions is that the system would have kept the “steer angle or slip angle” at “less than ten percent.” (ECF No. 198-8 at 10.) Although not explained as such by Mr. Loudon’s own testimony, this appears to refer back to the conclusion stated in his report that “[b]ased on review of the GM requirements on high coefficient surfaces, the maximum allowed slip angle in a double lane change is 10 degrees,” and that “[t]he

accident vehicle's maneuver was similar to a double lane change." (ECF No. 198-8 at 35.) However, Mr. Loudon still provides no explanation for how he concluded that ESC system would have kept within this 10-degree tolerance given the specific circumstances of this Crash (including, for example, by addressing the speed, road curvature, Vehicle's dynamics, and the distance in which the driver attempted to regain control).

Moreover, the Court finds that neither Plaintiffs' briefing nor Mr. Loudon's testimony and report have shown a reliable (and therefore admissible) basis for his statement that the maneuver in this case was sufficiently similar to a "double lane change" test to support his conclusory causation opinions. In particular, at the time when Mr. Loudon opines the ESC system should have engaged by braking the "two outside wheels," it is undisputed that those wheels were off the pavement on a snowy gravel shoulder. Mr. Loudon nowhere explains how these circumstances reliably correspond to the testing he cites having been done on "high coefficient surfaces." (See ECF No. 203-8 at 8.) When asked in deposition what effect the snowy surface would have had, Mr. Loudon conceded there would be "reduced grip," but fell back on the circular explanation that the corrective action of the ESC system would nevertheless have been "significant," meaning enough to avert the Rollover. Ultimately, Mr. Loudon's statement that the circumstances of this Crash were similar to the "double lane change" test is no less conclusory than his resulting opinion that the ESC system would have prevented the Rollover. These conclusory opinions do not pass muster under Rule 702 and thus Plaintiffs have failed to carry the burden of showing that Mr. Loudon's

causation opinions are admissible.<sup>6</sup> See *Mitchell v. Gencorp Inc.*, 165 F.3d 778, 780 (10th Cir. 1999) (expert testimony must have a “grounding in the methods and procedures of science” and be “based on actual knowledge and not subjective belief or unsupported speculation.” (internal quotation marks omitted)).

Accordingly, Defendants’ Motions are GRANTED IN PART to the extent that Mr. Loudon *may* opine, based on his research, experience, and knowledge, that a functioning ESC system would have “*assisted*” the driver in regaining control (or similar non-definitive testimony) (see, e.g., ECF No. 198-6 at 35–36 (“ESC could have assisted during both the initial steer to the right and during the left steer or counter-clockwise yaw”); *id.* at 35 (“[w]ithout functioning ESC there is a much greater *risk* of loss of control” (emphasis added)), but, he is EXCLUDED from opining that a functioning ESC would definitively have prevented the driver’s loss of control and the ultimate Rollover Crash (see, e.g., *id.* at 35 (“If the driver had the benefit of a functioning ESC system, the driver would not have lost control”)).

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<sup>6</sup> Given the conclusion that Plaintiffs have not carried their burden of showing that Mr. Loudon’s causation opinions were grounded in reliable methods, the Court need not address the likely factual disputes regarding the sequence of events precipitating the Rollover, including whether the driver first actively turned the Vehicle to the right to avoid a deer or other object in the road or merely continued driving straight as the road curved to the left (because of drowsiness or otherwise). (See *generally* ECF No. 203 at 8; ECF No. 232 at 8–13.) However, the Court notes that Mr. Loudon testified that in forming his opinion he relied exclusively on Plaintiff Daniel Pertile’s report of what the driver had said, rather than on any of the available documentary or physical evidence. (See ECF No. 203-8 at 3–4; *id.* at 8.) Although an expert may rely on inadmissible evidence, see Fed. R. Evid. 703, it is doubtful the driver’s hearsay report provided a sufficiently reliable basis under Rule 702 for expert opinions here, in lieu of relying on the physical and documentary evidence. For purposes of trial, the Court also notes that an expert’s testimony may not simply become a “conduit for hearsay.” See, e.g., *Marsee v. U.S. Tobacco Co.*, 866 F.2d 319, 323 (10th Cir. 1989); 3 Christopher B. Mueller & Laird C. Kirkpatrick, *Federal Evidence* § 7:16 (4th ed., May 2016 update) (“While an expert may consider remote statements that are not admitted and may be inadmissible, he cannot properly act as a conduit by presenting an opinion that is not his own opinion.”).

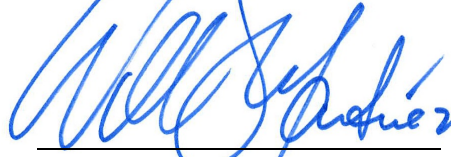
#### IV. CONCLUSION

For the reasons set out above, the Court ORDERS as follows:

1. Defendant Kelsey-Hayes Company's Motion to Exclude Steve[n] Loudon's ESC Opinions (ECF No. 198) is GRANTED IN PART as explained herein;
2. Defendant General Motors LLC's Motion to Exclude the Testimony of Steven Loudon (ECF No. 203) is GRANTED IN PART as explained herein; and,
3. Defendants' Requests for Oral Argument on these motions are DENIED.

Dated this 15th day of September, 2017.

BY THE COURT:



William J. Martínez  
United States District Judge