STATE OF NORTH CAROLINA

IN THE GENERAL COURT OF JUSTICE SUPERIOR COURT DIVISION FILE NO. \_\_\_\_\_

WAKE COUNTY	
-------------	--

STATE OF NORTH CAROLINA ex rel. JOSHUA H. STEIN, ATTORNEY GENERAL,	))
Plaintiff,	) )
<b>v.</b>	)
APPLE INC.	)
Defendant.	)

COMPLAINT

#### **INTRODUCTION**

1. This is an action by the above-captioned plaintiff, State of North Carolina, by and through Attorney General Joshua H. Stein (the "State"), against Apple Inc. ("Apple") for Apple's unfair and deceptive acts and practices, which violated the North Carolina Unfair and Deceptive Trade Practices Act, N.C. Gen. Stat. § 75-1.1, *et. seq.* 

2. In short, and as described more fully below, Apple violated the North Carolina Unfair and Deceptive Trade Practices Act by, among other things, misrepresenting and concealing information about "unexpected shutdowns" or "unexpected power-offs" ("UPOs") affecting its iPhone devices; misrepresenting and concealing information about iPhone battery health and performance; and misrepresenting and concealing information about its iOS<sup>1</sup> software updates that slowed or "throttled" the performance of iPhone devices.

3. Accordingly, the State seeks to enjoin Apple from further violations and to recover restitution, disgorgement, civil penalties, interest, costs, fees, and all other relief provided by law for Apple's past and ongoing violations.

<sup>&</sup>lt;sup>1</sup> iOS is the name of the operating system developed by Apple for its mobile devices, including iPhones.

#### PARTIES

4. The State is authorized to pursue this action by the Article 1 of the North Carolina Unfair and Deceptive Trade Practices Act, and N.C. Gen. Stat. §§ 75-1.1 *et seq.* 

5. Apple is a California corporation with its principal place of business in Cupertino, California.

## JURISDICTION AND VENUE

6. This Court has original jurisdiction pursuant to Article IV, Section 12, Clause 3 of the North Carolina Constitution and N.C. Gen. Stat. §§ 75-10, 75-12, and 75-15.2, including issuance of orders both before and following a determination of liability.

7. This Court has subject-matter jurisdiction.

8. Defendant transacted business within North Carolina at all times relevant to this Complaint.

9. Defendant caused events to occur in North Carolina out of which the claims detailed in this Complaint arose.

10. Venue is appropriate in this Court pursuant to N.C. Gen. Stat. § 75-14.

# FACTUAL ALLEGATIONS

#### Apple

11. Apple is the largest public company in the United States, with a market capitalization of around \$2 trillion and roughly \$200 billion in cash and equivalents on hand.

12. Apple consistently has advertised its iPhones as premium products, with an emphasis on speed, performance, and battery life.

13. Apple, for example, marketed its iPhone 5 as having "blazing fast performance," a "blazing fast A6 chip," "the world's most advanced mobile operating system," "even longer battery life," an "LTE solution that provides blazing fast speeds," and support for "ultrafast wireless standards," enabling consumers to "browse, download and stream content even faster."

14. Apple also claimed:

The all-new A6 chip was designed by Apple to maximize performance and power efficiency to support all the incredible new features in iPhone 5, including the stunning new 4-inch Retina display-all while delivering **even better battery life**. With up to twice the CPU and graphics performance, almost everything you do on iPhone 5 is blazing fast for launching apps, loading web pages and downloading email attachments.

(Emphasis added.)

15. Apple released the iPhone 6 and 6 Plus devices in September 2014.

16. Apple advertised its iPhone 6 as having "The Biggest Advancements in iPhone History," "packed with innovative technologies," including "Advanced Cameras" and a "Powerful A8 Chip," and designed for "**blazing fast performance and power efficiency**." (Emphasis added.)

17. An Apple press release also claimed:

"iPhone 6 and iPhone 6 Plus are the biggest advancements in iPhone history," said Tim Cook, Apple's CEO. ... "Only Apple can combine the best hardware, software and services at this unprecedented level and we think customers are going to love it."

18. Apple released the iPhone 7 and 7 Plus devices in September 2016.

19. Apple later advertised its iPhone 7 as "the best, most advanced iPhone ever," with "the Best Battery Life Ever in an iPhone," and "packed with unique innovations," including "advanced camera systems," "more power and performance with the best battery life ever in an iPhone," "the most powerful chip ever in a smartphone," and more powerful graphics performance, "[e]nabling a new level of gaming and professional apps."

# **Unexpected Power-Offs**

# iPhone 5 Series Devices

20. Notwithstanding Apple's advertising, consumers had begun complaining about unexpected shutdowns (internally referred to by Apple as "unexpected power-offs" or "UPOs") that consumers experienced on iPhone 5 devices as early as 2012.

# iPhone 6 Series Devices

21. Additionally, consumers in 2016 began reporting even greater numbers of UPOs affecting newer iPhones, including the iPhone 6 and 6s.

22. These shutdowns were tied to issues with the iPhone batteries, which would sometimes show available power dropping dramatically from 50% to 30% or lower.

23. Apple confirmed that these UPOs were indeed battery-related, like the prior iPhone5 UPOs.

24. However, Apple limited the amount of battery information available to its consumers, which prevented consumers from being able to ascertain the true reason they were experiencing UPOs.

25. Apple initiated a recall related to the UPO issue in November 2016 during ongoing discussions with the Chinese authorities.

26. During that time, however, Apple never publicly disclosed that the UPO issue actually extended well beyond what Apple claimed was a "very small number of iPhone 6s devices" involved in the recall.

27. Instead, Apple's statements regarding the extent of the UPO issues in late 2016 were false, misleading, and even contradictory, and they were targeted solely to the Chinese market, despite the fact that UPOs occurred in iPhones across the globe.

28. Indeed, Apple's statement of December 1, 2016, *which was published only on the company's Chinese support page*, claimed:

After hearing reports from iPhone customers whose devices unexpectedly shut down, we thoroughly looked into these reports, and collected and analyzed devices. We found that a **small number of iPhone 6s devices** made in September and October 2015 contained a battery component that was exposed to controlled ambient air longer than it should have been before being assembled into battery packs. As a result, these batteries degrade faster than a normal battery and cause unexpected shutdowns to occur. It's important to note, this is not a safety issue.

•••

We also want our customers to know that an iPhone is actually designed to shut down automatically under certain conditions, such as extremely cold temperature. To an iPhone user, some of those shutdowns might seem unexpected, but they are designed to protect the device's electronics from low voltage.

We looked for any other factors that could cause an iPhone to shut down unexpectedly. After intensive investigations, no new factors have been identified. We will continue to monitor and analyze customer reports.

(Emphasis added.)

- 29.
  - Apple's statement just five days later, published on the very same webpage,

claimed:

We take every customer concern very seriously, including the limited number of reports of unexpected shutdown with iPhones. We also want to thank the agencies for forwarding concerns to us and their engagement with us. Every time we encounter an issue, we investigate using a thorough process including analyzing these devices. We also look at diagnostic information from the broader set of customers who have opted in to our standard diagnostic data reporting. When we find something, we work to quickly provide our customers with a solution.

As a result of our investigation on this, we found that a small number of iPhone 6s devices made in September and October 2015 contained a battery component that was exposed to controlled ambient air longer than it should have been before being assembled into battery packs. Two weeks ago, we launched a worldwide program to replace affected batteries, free of charge. We again apologize for any customer inconvenience. It's important to note, this is not a safety issue.

A small number of customers outside of the affected range have also reported an unexpected shutdown. Some of these shutdowns can occur under normal conditions in order for the iPhone to protect its electronics. In an effort to gather more information, we are including additional diagnostic capability in an iOS software update which will be available next week. This will allow us to gather information over the coming weeks which may potentially help us improve the algorithms used to manage battery performance and shutdown. If such improvements can be made, they will be delivered in future software updates.

(Emphasis added.)

30. Apple never publicly disclosed what constituted the "small number of iPhone 6S devices"; the "limited number of reports of unexpected shutdown"; or the "small number of customers" repeatedly referenced in these statements. Apple certainly had such information, however.

31. On information and belief, Apple's worldwide "installed base" of iPhones was roughly 715 million in December 2016, and **millions of iPhone devices worldwide experienced at least one UPO each day in late 2016**.

32. Thus, contrary to Apple's public statements, the UPO issue was not affecting a "small number" or "very small number" of users or devices in late 2016.

33. Instead, the UPO issue was affecting millions of users daily.

34. Apple's behavior confirms this understanding, given that it chose to adopt a drastic countermeasure that was not limited to a "small number" of devices but was delivered instead to the entire installed base of iPhone 6 series devices in iOS 10.2.1 and 7 series devices in iOS 11.2, as described below.

# **Battery Replacements**

35. Despite Apple's attempt to minimize the public perception of the breadth and depth of its UPO problems, various consumers and journalists continued to report that the UPO issues occurred far more frequently than Apple was admitting.

36. In the end, the UPO issues came down to a battery problem. Thus, some consumers were able to fix the problem by replacing their iPhone batteries.

37. Apple, however, never confirmed during the relevant period that a simple battery replacement would have resolved the UPO issue.

38. To the contrary, Apple actively worked to prevent consumers from replacing their iPhone batteries (even at full, out-of-warranty cost) unless the batteries failed Apple's own diagnostic test.

39. To make matters worse, Apple's diagnostic test did not account for the problem that Apple knew was causing the UPOs.

40. Thus, Apple was providing misleading information to consumers about the state of their batteries and, based on that misleading information, discouraging and preventing battery replacements.

# Throttling

41. Instead of simply disclosing the UPO issues or allowing battery replacements to resolve the UPO issues, Apple developed a scheme that could cover up the UPO issues quietly through an iOS software update.

42. Apple chose to implement an update to the iOS software to limit the phones' hardware performance (e.g., throttle) so that the phones could not demand the power levels that were exceeding the abilities of problem batteries, which were, in turn, causing the UPOs.

43. After the data received from the iOS 10.2 release largely confirmed Apple's understanding of the issue, the company moved forward with iOS 10.2.1, which was first released to the public on January 23, 2017, and implemented the throttling with regard to iPhone 6, 6 Plus, 6s, 6s Plus, and SE devices.

44. Apple later implemented throttling for iPhone 7 and 7 Plus devices in December 2017 with the release of iOS 11.2.

45. As noted above, despite Apple's repeated statements regarding a purportedly "small number" of devices affected by UPOs, the throttling mechanisms in iOS 10.2.1 and 11.2 were delivered to Apple's "entire install base" and were not phone specific—in other words, any phone could be affected at any time, depending on a number of factors.

46. In addition, despite Apple's statements that the UPO issues did not affect iPhone 8 and later devices, the company eventually conceded that it would need to throttle those devices, as well.

47. In short, the UPO issue was not limited to a "small number" of phones but was instead endemic to all iPhones.

#### **Concealment of Throttling**

48. Again, though, Apple chose to conceal its throttling (along with the underlying UPO issues described above) from consumers.

49. Indeed, despite the significance of the throttling "fix," the original release or "read me" notes for iOS 10.2.1 and 11.2 gave no indication of any anticipated throttling or reduced performance whatsoever.

50. To the contrary, the notes for 10.2.1 referred only to unspecified "bug fixes," security updates, new features, and other "improvements."

51. Further, although Apple later quietly amended the iOS 10.2.1 release notes on February 23, 2017 (one month after the original release date), the amended notes merely reflected that the update "also improves power management during peak workloads to avoid unexpected shutdowns on iPhone."

52. In addition, the release notes were amended only after more than 50% of users had already downloaded the update, such that those users never were prompted to review the release notes.

53. Likewise, consumers who purchased an iPhone with iOS 10.2.1 (or a subsequent iOS version) pre-installed never would have been prompted to review the notes either.

54. Therefore, the vast majority of affected iPhone users never had any indication that Apple had "improve[d] power management," let alone intentionally throttled the performance of their iPhone.

#### **Admission of Throttling**

55. Due to Apple's lack of disclosures, it was not until mid-December 2017 when several sophisticated Apple consumers reported, based on their own research, that iOS 10.2.1 and 11.2 appeared to have throttled iPhones.

56. By December 20, 2017, the public reaction to this news had forced Apple to confirm the consumers' suspicions.

57. In doing so, however, Apple again provided only vague explanations for its conduct, claiming that the iOS updates were intended to "smooth out instantaneous peaks" in performance demands for devices with older batteries.

58. After further outcry, though, Apple finally released a more detailed statement and apology on December 28, 2017, ultimately confirming the reports of throttling.

59. Apple also noted in its December 28 statement that the throttling updates applied to the iPhone 6, 6 Plus, 6s, 6s Plus, SE, 7, and 7 Plus, and it attempted to address customer concerns by (i) reducing the price for out-of-warranty replacement batteries for these phones from \$79 to \$29; (ii) promising to issue a new iOS update "with new features that give users more visibility into the health of their iPhone's battery, so they can see for themselves if its condition is affecting performance"; and (iii) vaguely ensuring that it was "working on ways to make the user experience even better . . . ."

60. Thereafter, Apple released iOS 11.3 on March 29, 2018, which, for the first time, allowed consumers to turn off the throttling mechanism in their iPhones.

#### **Effects of Apple's Conduct on Sales**

61. Although consumers eventually learned the truth about Apple's secret throttling, Apple reaped the benefits of that throttling for about a year.

62. During that time, consumers with iPhones experienced reduced performance, and Apple told many of those consumers that their batteries did not need to be replaced. As a result, many consumers decided that the only way to get improved performance was to purchase a newermodel iPhone from Apple.

63. Apple, of course, fully understood such effects on sales. When informed of UPO and throttling issues, and when given the choice, consumers were far more likely to replace their batteries (thus avoiding an unnecessary upgrade to another iPhone) than they had been prior to Apple's UPO and throttling disclosures.

64. In sum, Apple's unfair and deceptive acts and practices described above artificially increased Apple's iPhone sales, potentially by millions of devices per year.

65. Apple recently settled a private class action lawsuit regarding this conduct. Under that proposed settlement, Apple must pay affected consumers up to \$500 million.

# **CAUSES OF ACTION**

## COUNT ONE:

# VIOLATIONS OF THE NORTH CAROLINA UNFAIR AND DECEPTIVE TRADE PRACTICES ACT, N.C. Gen. Stat. § 75-1.1, et seq.

66. The State re-alleges and incorporates the other allegations of this Complaint as if set forth fully herein.

67. In connection with its advertisement and sale of iPhones, iPhone batteries, and iOS software releases within North Carolina and to North Carolina consumers and residents, Apple engaged in unfair and deceptive acts and practices.

- 68. Such conduct includes but is not limited to:
  - Making deceptive representations and misrepresentations about the number
     of iPhone devices affected by UPOs and the causes of those UPOs;
  - Concealing, suppressing, and omitting material facts about the number of iPhone devices affected by UPOs and the causes of those UPOs with the intent that consumers rely on such concealments, suppressions, or omissions;
  - c. Making deceptive representations and misrepresentations about the health of consumers' iPhone batteries;
  - d. Concealing, suppressing, and omitting material facts about the health of consumers' iPhone batteries with the intent that consumers rely on such concealments, suppressions, or omissions;
  - e. Unfairly discouraging and preventing iPhone users from replacing their batteries, when Apple knew that replacing the batteries likely would fix the UPO issue;

- f. Making deceptive representations and misrepresentations about the nature,
   effects, and consequences of iOS software updates;
- g. Concealing, suppressing, and omitting material facts about the nature, effects, and consequences of iOS software updates with the intent that consumers rely on such concealments, suppressions, or omissions; and
- h. Unfairly precluding iPhone users from declining or turning off the throttling of their devices.

69. Accordingly, Apple violated the North Carolina Unfair and Deceptive Trade Practices Act, N.C. Gen. Stat. § 75-1.1, *et seq*.

70. In doing so, Apple acted willfully in that it knew or should have known, at all relevant times, that its conduct was of the nature prohibited by the North Carolina Unfair and Deceptive Trade Practices Act.

71. Apple's unlawful acts and practices in violation of the North Carolina Unfair and Deceptive Trade Practices Act were targeted to and affected North Carolina residents.

#### **PRAYER FOR RELIEF**

WHEREFORE, the State respectfully requests that this Court enter judgment against Apple and in favor of the State as follows:

72. Pursuant to N.C. Gen. Stat. § 75-14, issue permanent injunctive relief, enjoining and restraining (a) Apple, (b) its officers, agents, servants, employees, attorneys, and (c) all persons in active concert or participation with Apple or its officers, agents, servants, employees, or attorneys, directly or indirectly, from engaging in the unlawful acts and practices alleged herein;

73. Pursuant to N.C. Gen. Stat. § 75-15.1, order that Apple restore to all persons in interest any monies or property, real or personal, which may have been acquired by any unlawful act or practice alleged herein;

74. Pursuant to N.C. Gen. Stat. §§ 75-15 through 75-16.1, order Apple to disgorge all profits, gains, gross receipts, or other benefits obtained as a result of its unlawful acts alleged herein;

75. Pursuant to N.C. Gen. Stat. § 75-15.2, order Apple to pay to the State of North Carolina a civil penalty of up to \$5,000.00 for each willful violation by Apple of the North Carolina Unfair and Deceptive Trade Practices Act;

Pursuant to N.C. Gen. Stat. § 75-16.1, order Apple to reimburse the State for its 76. costs and attorneys' fees incurred in the investigation and prosecution of Defendant's activities alleged in this Complaint;

Pursuant to N.C. Gen. Stat. §§ 24-1, 24-5, and 75-15.1, require Apple to pay pre-77. judgment and post-judgment interest to the State and all consumers; and

Award the State such further relief as the Court deems just and proper under the 78. circumstances.

RESPECTFULLY SUBMITTED this 18th day of November 2020.

JOSHUA H. STEIN Attorney General

by:

TRACY NAVER Assistant Attorney General State Bar No. 36964 tnayer@ncdoj.gov CREECY JOHNSON Special Deputy Attorney General State Bar No. 32619 ccjohnson@ncdoj.gov North Carolina Department of Justice Consumer Protection Division P.O. Box 629 Raleigh, North Carolina 27602 Telephone: (919) 716-6000 Facsimile: (919) 716-6050 Counsel for the State of North Carolina