

BUSINESS INSIDER

There are problems with Apple's iPhone battery explanation — and the company might end up paying the price in court

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JAN. 20, 2018, 8:00 AM

- **Apple is under fire for a software feature that slows down the speed of iPhone processors to prevent unexpected device shutdowns.**
- **Congress, attorneys, and customers are criticizing Apple for not being clearer when the feature was introduced in early 2017.**
- **Apple's CEO says that when Apple "did put it out, we did say what it was."**
- **The feature was not mentioned in the release notes accompanying the update, but Apple quietly revised the notes to include a line about "power management" at some point after the update was released.**

Apple is [under fire](#) for a software feature distributed to iPhones in 2017 that prevents [shutdowns](#) in devices with older batteries, in part by slowing down the clock speeds of their processors.

Congress, several international consumer protection agencies, and an estimated 45 class-action lawsuits are asking questions, and wondering if users [should have been better informed that Apple was making a tradeoff between iPhone stability and speed](#).

Basically, many users feel that Apple should have let them know that a software update was going to slow down their phone, or given them a choice not to turn the update on. Apple says a phone with the feature active can take longer to launch apps and can display lower frame rates.

Here's how Apple's CEO explained the problem in an ABC interview earlier this week:

"About a year ago, we released some code, that essentially what it does, is all batteries age over time, and they become unhealthy in a point in time," Apple CEO Tim Cook said in [his first public comments](#) on the controversy. "An unhealthy battery has a probability that it will create an unexpected restart."

"When we did put it out, we did say what it was, but I don't think a lot of people were paying attention, and maybe we should have been clearer as well," he continued.

But even an Apple user who was paying attention would not have known about the feature had they downloaded the update shortly after it was available. Apple documents any major new features or improvements alongside new software updates in messages called "release notes." For people who don't read tech blogs, this is often the way they learn what's new in a software update.

There was no mention of the CPU throttling feature or "power management" included with the release notes that accompanied the software update on January 23.

However, release notes associated with the software update, quietly revised on Apple's website after the software's release, now mention "power management during peak workloads."

A month without mention

According to Apple's December 28 message to customers, the throttling feature was first included in the software update for iOS 10.2.1, which was released on January 23, 2017.

For minor updates, release notes can be as short as a sentence, but for major updates, like when a new iPhone comes out, they can be pages long.



On January 23, the update was called a "point update," signaling that Apple did not consider it a major software update.

The release notes only said it contained "bug fixes," and security patches, according to [Forbes, which published](#) a screenshot of the release notes from an iPhone, which is different from the notes now listed on Apple's website.

Blog posts from 9 to 5 Mac and MacRumors at the time also say that the release notes were short and didn't mention power management.

Apple finally acknowledged the battery feature one month later after iOS 10.2.1 on February 23, in a press statement [reported by TechCrunch](#), saying the feature was already on "over 50% of active iOS devices" and that its test data showed that it had reduced the occurrence of [an annoying shutdown problem](#).

TechCrunch also published some high-level explanation of the bug on February 23 and why Apple addressed it. That was the first time Apple publicly disclosed the feature that is now drawing attention from Congress, and over half of iOS device users had already installed it with no warning or signal of any new power management feature.

There is now a line in the [backwards-looking release notes on Apple's website](#) that mentions the CPU throttling feature. The sentence was added before March 17, 2017, but after January 23, [according to archive.org](#):

It also improves power management during peak workloads to avoid unexpected shutdowns on iPhone.

Revising release notes weeks after they were first published is unusual. But Apple had been avoiding questions about the shutdown issue for [over six months](#).

In December, Apple said that it "[extended](#)" the CPU-throttling feature to the iPhone 7, which is a newer model of device than the iPhones that were experiencing [the shutdown issue](#) that Cook was talking about. However, the release notes for that update did not mention a power management feature, either.

'Maybe we should have been clearer'

Whether Apple should have more clearly communicated the changes has now attracted the attention and ire of [US Congress](#), lawyers, and consumers, who all want more information from Apple on how it

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January 12, 2018

Mr. Tim Cook
Chief Executive Officer
Apple Inc.
One Infinite Loop
Cupertino, CA 95014

Dear Mr. Cook:

Recent media reports indicate that users of select Apple iPhone models have experienced diminished processor performance following the installation of software updates to the iPhone's operating system (iOS).¹ The diminution in processor performance has allegedly resulted in an overall slowdown of the iPhone's operations for these users. The Committee appreciates Apple's willingness to provide Committee staff with an initial briefing on this issue.

handles iPhone processor speeds.

"There should have been other things that Apple did to make clear to the public that the CPU performance was going to be throttled and they just didn't do that," [said Scott Cole](#), an Oakland attorney who [recently filed a complaint](#) on behalf of aggrieved parties about the Apple battery slowdown.

"Prior to installation of an iOS software update, does Apple inform users of the potential for a reduction in processor performance associated with an update?" [asks a letter](#) from the House Committee on Energy and Commerce sent to Cook earlier this month.

Apple is also facing a slew of class-action lawsuit complaints, as many as 45, in various courts around the country, according to Cole.

"Our responsibility is to our own client and what's referred to as the 'putative class,' or all the people who purchased various iterations of the iPhone 6 and 7, that frankly were duped along the way in a couple of ways," Cole said. "First we intend to prove in the cases that Apple should have used a larger battery to begin with."

"But more importantly, Apple kept information from consumers for quite some time, didn't reveal the fact that the rollout of a new operating system was going to have the effect of dropping back phones," he continued, declining to comment on the specific timing or content of Apple's iOS release notes.

Apple didn't respond to multiple requests for comment. But answers to these questions will eventually emerge. The House letter to Apple requests a response by next Friday. And [several international oversight agencies](#) have opened their own investigations.

Cole also expects the class-action lawsuits to progress over the next year. The first step, likely happening over the next few months, could be a process called "multi-district litigation," where the defendant — in this case Apple — doesn't want to fight a number of different cases in different courts, so it petitions to have the suits combined into one case.

After that, the case could be settled in a matter of months, or a matter of years, depending on what the lawyers find. "These cases, they generally have a life of a couple of years," Cole said.