The chief's decision came less than a day after city commissioners gave him a "no confidence" vote and after a couple of weeks of protests and uproar on social media websites.

SANFORD, Fla. (AP) -- The investigation into last month's shooting death of an unarmed black teenager in an Orlando suburb is out of the hands of the beleaguered police chief and the county prosecutor with the Justice Department looking at possible civil rights violations and a grand jury perhaps considering charges.

Until admitted shooter George Zimmerman is led away in handcuffs, the parents of 17-year-old Trayvon Martin and the civil rights activists and others who have rallied for their cause say they won't be satisfied.

"We cannot allow a precedent when a man can just kill one of us ... and then walk out with the

murder weapon," said civil rights leader Al Sharpton, flanked by Martin's parents and a stage full of supporters at a rally in Sanford on Thursday night. "We don't want good enough. We want George Zimmerman in court with handcuffs behind his back."

Police Chief Bill Lee said earlier in the day that he was stepping down temporarily to try to cool the building anger that his department did not arrest neighborhood watch volunteer Zimmerman, who has said he shot Martin on Feb. 26 in self-defense. Hours later, the governor announced that the local state attorney, Norman Wolfinger, had recused himself from the case.

Martin's parents, Tracy Martin and Sybrina Fulton, believe Zimmerman should have been arrested. They claim he was profiling their son and acted like a vigilante.

Tracy Martin told the thousands at the rally to keep his son in their minds.

"If Trayvon were here, he would have been here tonight," he said. "He was a people person. Let's get justice for your son."

The signs, chants and sentiments all came down to a demand for justice in the case. Another rally was set for the state capitol Friday and students at Martin's Miami high school planned to walk out in protest in the afternoon.

At Thursday's protest, some people carried signs that said: "100 years of lynching, justifiable homicide. Same thing." Others sold T-shirts that read: "Arrest Zimmerman."

"It's the norm around here, where anything involving black culture, they want to wipe their hands of it," said Shella Moore, who is black and grew up in Sanford.

The Justice Department and FBI have opened a civil rights investigation, and the local prosecutor before he quit the case convened a grand jury April 10 to determine whether to charge Zimmerman.

Martin was returning from a trip to a convenience store when Zimmerman started following him, telling police dispatchers he looked suspicious. At some point, the two got into a fight and Zimmerman pulled out his gun.

Zimmerman told police Martin attacked him after he had given up on chasing the teenager and was returning to his sport utility vehicle. Police say the 28-year-old Zimmerman is white; his family says he's Hispanic.

The shooting ignited resentment toward the police department in this Orlando suburb for not making an arrest. Civil rights groups have held rallies in Florida and New York, saying the shooting was unjustified. Of Sanford's 53,000 residents, 57 percent are white and 30 percent are black.

In a letter to Gov. Rick Scott, state attorney Wolfinger said that while he thought he could fairly oversee any prosecution that develops in the case, his recusal was aimed at "toning down the rhetoric and preserving the integrity of the investigation." Scott appointed Angela B. Corey, the state attorney for the Jacksonville area, to take over.

The chief's decision came less than a day after city commissioners gave him a "no confidence" vote and after a couple of weeks of protests and uproar on social media websites. Lee has said evidence supported Zimmerman's assertion that the shooting was in self-defense.

"I do this in the hopes of restoring some semblance of calm to a city which has been in turmoil for several weeks," Lee said.

The chief said he stood behind his agency's investigation.

"As a former homicide investigator, a career law enforcement officer and a father, I am keenly aware of the emotions associated with this tragic death of a child. I'm also aware that my role as a leader of this agency has become a distraction from the investigation," Lee said.

Martin's parents said the police chief's action wasn't enough, and that Zimmerman should be taken into custody.

"We want an arrest, we want a conviction and we want him sentenced for the murder of my son," Martin's father, Tracy, said to the fiery crowd of protesters at Fort Mellon Park.

It wasn't immediately clear how long the police chief would step aside. Some people said he should just quit.

"If they wanted to defuse a potential powder keg, he needed to resign," said pastor Eugene Walton, 58, who was born and raised in Sanford. "His inaction speaks loudly to the black community."

News of the police chief's decision to step aside spread quickly among the protesters, many of whom showed up more than two hours before the start of the rally. They chanted "The chief is gone. Zimmerman is next."

Dick Gregory, a comedian who uses humor to convey his civil rights message, said the steady pressure should be the goal going forward.

"All you have to do is be a turtle," he said. "Hard on the outside, soft on the inside and willing to stick your neck out."