

Opponents to take aim at giant telescope at Hawaii hearing

19 October 2016, by Jennifer Sinco Kelleher



This undated file artist rendering made available by the TMT Observatory Corporation shows the proposed Thirty Meter Telescope, planned to be built atop Mauna Kea, a large dormant volcano in Hilo on the Big Island of Hawaii in Hawaii. The \$1.4 billion project to build one of the world's largest telescopes is up against intense protests by Native Hawaiians and others who say building it on the Big Island's Mauna Kea mountain will desecrate sacred land. (TMT Observatory Corporation via AP, File)

A \$1.4 billion project to build one of the world's largest telescopes is up against intense protests by Native Hawaiians and others who say building it on the Big Island's Mauna Kea mountain will desecrate sacred land.

Hearings for the project's construction permit began Thursday. By the end of the day, the first witness was still being questioned by the numerous parties involved in the case. It's the second time the project has faced the proceedings.

Dozens of witnesses plan to testify in the coming weeks, including a group of Native Hawaiians who support the telescope. It's not clear when a retired judge overseeing the hearings would rule.

Here are things to know about the embattled telescope:

THIRTY METER TELESCOPE

A group of universities in California and Canada plan to build the telescope with partners from China, India and Japan. Its primary mirror will measure 30 meters in diameter and be made up of 492 individual segments. Compared with the largest existing visible-light telescope in the world, it will be three times as wide, with nine times more area.

Scientists say the telescope would allow them to see into the earliest years of the universe. The telescope could find planets around other stars in the "habitable zone," where liquid water is possible on a planet's surface, the project's website says. The 13 telescopes already on Mauna Kea have played major roles in discoveries considered among the most significant to astronomy. Partners would receive a share of observing time, along with University of Hawaii scientists.

THE LOCATION

Telescope officials say Mauna Kea, a dormant volcano, is the best location in the world for astronomy. It's Hawaii's tallest volcano and its summit provides a clear view of the sky for 300 days a year, with little air and light pollution. Opponents say the project will desecrate land held sacred by Native Hawaiians and that there are already too many telescopes on Mauna Kea. All of the highest points in the islands are considered the home of deities, said Kealoha Pisciotta, one of the leaders in the telescope fight.

POWER OF PROTESTERS

Protests disrupted a groundbreaking and Hawaiian blessing ceremony at the site two years ago. After that, the protests intensified. Construction stopped

in April 2015 after 31 protesters were arrested for blocking the work. A second attempt to restart construction a few months later ended with more arrests and crews retreating when they encountered large boulders in the road. The telescope has become one of the most divisive issues in the state, with some telescope supporters saying they are afraid to publicly express their stance on the project.

HOW WE GOT HERE

The telescope's board of directors held public meetings before selecting Mauna Kea as the preferred site in 2009. In 2011, opponents requested so-called contested-case hearings before the state land board approved a permit to build on conservation land. The hearings were held, and the permit was upheld. Opponents then sued. In December 2015, the state Supreme Court revoked the permit, ruling the land board's approval process was flawed. That meant the application process needed to be redone, requiring a new hearing.

QUASI-JUDICIAL HEARING

Confusion reigned as Thursday's hearing got underway in a Hilo hotel banquet room. Various telescope opponents complained about the scheduling and location of the hearing. One lawyer wanted to know the process for making objections. More than an hour went by before the first witness, environmental planner Perry White, was called to testify.

All witnesses will be allowed to provide a 10-minute summary of written testimony already submitted. But before White could provide his summary, there were various objections about qualifying him as an expert. Nearly two dozen people—many who are individual telescope opponents who don't have lawyers representing them—will have a chance to cross-examine each witness.

Cross-examination of White will resume Monday.

WHAT'S AT STAKE

If the project dies, not only will that be bad for

Hawaii astronomy, but for any high-tech industry considering Hawaii, said Paul Coleman, a Native Hawaiian astrophysicist at the University of Hawaii's Institute for Astronomy. The partners invested \$170 million through the end of 2015, Thirty Meter Telescope Executive Director Ed Stone said. The project promises to create 300 construction jobs and employ 140 staff when operational. Earlier this year, telescope officials began looking for alternate sites in case the telescope can't be built in Hawaii.

© 2016 The Associated Press. All rights reserved.

APA citation: Opponents to take aim at giant telescope at Hawaii hearing (2016, October 19) retrieved 28 January 2021 from <https://phys.org/news/2016-10-divisive-telescope-hawaii.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.