

FEDERAL DEFENDANTS'
DECLARATION OF
BRUCE P. STRAUSS

ATTACHMENT 17

Wagner v. U.S. Dep't of Energy
Civil No. 08-00136-HG-KSC (D. Haw.)



CERN Council looks forward to LHC start-up

Geneva, 20 June 2008. At its 147th meeting in Geneva today, the CERN¹ Council heard news on progress towards start-up of the laboratory's flagship research facility, the Large Hadron Collider (LHC). Commissioning of the 27-kilometre LHC began in January 2007 when the first cool down of one of the machine's eight sectors began. Today, five sectors are at or close to their operating temperature of 1.9 degrees above absolute zero and the remaining three are approaching that temperature. Once all sectors are cold, electrical testing will be concluded in readiness for first beams, currently scheduled for August.

"The accelerator, detectors and computing are all on course," said CERN Director General Robert Aymar, *"and we are looking forward to the earliest possible LHC start-up."*



Installing the beam pipe at the LHC on 16 June: the final section of 1

When the LHC starts up this summer, its proton beams will collide at higher energies than produced in a particle accelerator. The collision energy of the LHC, however, is modest compared to the energies of the cosmic ray protons that have been striking the Earth's atmosphere for billions of years.

"The LHC is the highest energy particle accelerator on Earth," said Dr Aymar, *"but the Universe has produced more powerful ones. The LHC will enable us to study in detail under laboratory conditions what nature is doing already."*

The LHC is subject to numerous audits covering all aspects of safety and environmental impact. One of these, addressing the question of whether there is any danger related to the production of strange particles at the LHC, was presented to Council at this meeting. Updating a 2003 paper, this report incorporates recent experimental and observational data. It confirms and strengthens the conclusions of the 2003 report that there is no cause for concern. The report was prepared by a group of scientists from CERN, the University of California, Santa Barbara, and the Institute for Nuclear Research of the Russian Academy of Sciences.

"With this report, the Laboratory has fulfilled every safety and environmental evaluation necessary to ensure safe operation of this exciting new research facility," said Dr Aymar.

The new report has been reviewed by the Scientific Policy Committee (SPC), a body that advises the Council on scientific matters. A panel of five independent scientists, including one Nobel Laureate, reviewed and endorsed the authors' approach of basing their arguments on irrefutable observations.

evidence to conclude that new particles produced at the LHC will pose no danger. The panel's conclusions to this week's meeting of the full 20 members of the SPC, who unanimously [agree on the conclusion](#).

"It was right for the Director General of CERN to commission a formal assessment of safety examining even the most unlikely of scenarios," said Council President Torsten Åkesson. "I conclude that there is no basis for any concern, a position endorsed by the 20 independent members of the SPC."

The new report is accompanied by a summary in non-technical language. All documents regarding [safety](#) and [environmental](#) impact of the LHC are available through the CERN web site.

More information

A summary of the LSAG report is available in the following languages: [en](#) [fr](#) [de](#) [es](#) [it](#). The [LSAG report](#) is available in English.

¹ CERN, the European Organization for Nuclear Research, is the world's leading laboratory for high energy physics. It has its headquarters in Geneva. At present, its Member States are Austria, Belgium, the Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Italy, Netherlands, Poland, Portugal, Slovakia, Spain, Sweden, Switzerland and the United Kingdom. India, Israel, the Russian Federation, the United States of America, Turkey, the European Commission and LHC have Observer status.

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