

2014 Landmark Awards: Special Project

BP High Performance Computing Center 13831 Katy Freeway, Houston, Texas



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In early 2011, BP began discussing its vision for the next step in the evolution of its industry-leading high-performance computing. What resulted was a new facility that demonstrated BP's commitment to sustaining a long-term presence in Houston.

It is the world's first petaflop computing center that will serve as a worldwide hub for processing and managing huge amounts of geophysical data from across BP's portfolio. This three story, 100,000-square-foot building houses 67,456 computers with 23.5 petabytes of disk space, equivalent to 147,000 Apple iPods each containing 160 megabytes.

In addition to enabling future growth, the new Center for High-Performance Computing also features improved electrical and cooling systems that reduce power consumption by 30 percent over the current facility, as well as space for other BP technical support systems and offices.

Located on BP's Westlake campus in the Energy Corridor, the center consists of computing space on two levels, electrical and mechanical support systems on one level and related support office space. In addition to computing, it also houses BP's global operations and infrastructures group. According to BP, it is "the world's largest super computer for commercial research."

The BP High-Performance Computing Center is a major milestone in the improvement of this ability to interpret data leading to discovery of previously hidden resources. The center enhances Houston's image as the world's leader in energy and will attract leaders and innovators in energy exploration from all over the globe