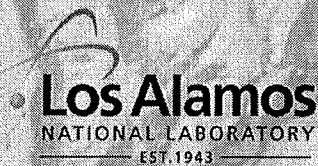
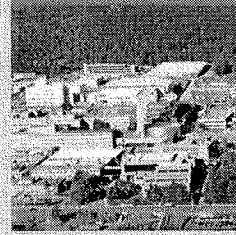
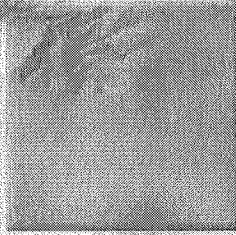
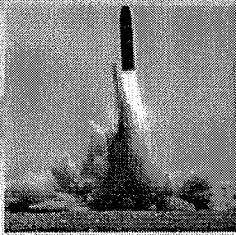
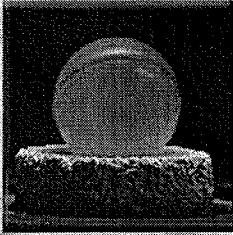
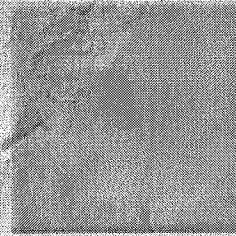
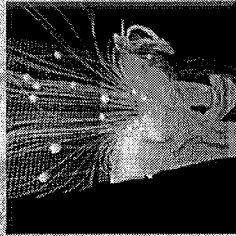
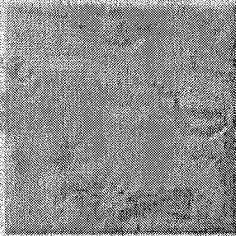
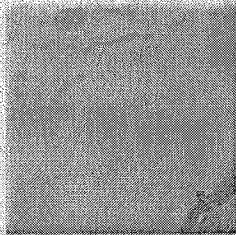
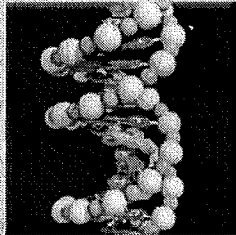
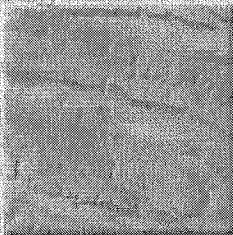
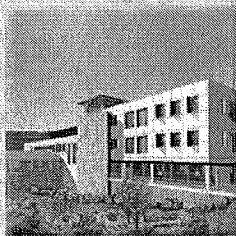
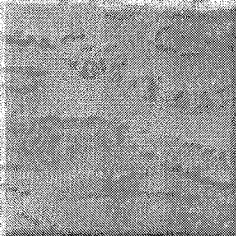
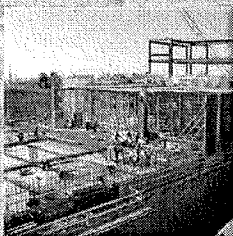


Ten-Year Site Plan FY09 - FY18

LOS ALAMOS NATIONAL LABORATORY



Capability to perform such work with the MTS as one of the identified approaches.

As discussed relative to NNSA mission needs in Section 3.1.2, the Laboratory is pursuing the signature facility concept MaRIE for achieving and maintaining leadership in materials-centric national security science. MaRIE's focus is on achieving solutions for transformational materials performance with an emphasis on matter-radiation interactions in extremes. Those solutions, enabled by MaRIE, will provide unique capabilities to address many national and global security challenges in addition to specific NNSA mission needs. MaRIE will be an international user facility and add to the suite of national user facilities provided through the Lujan Center, NHMFL, and CINT.

The mission need for the capabilities MaRIE would provide has been articulated in long-range planning by the materials research community, specifically DOE's SC Fusion Energy Science Advisory Committee (FESAC) and Basic Energy Sciences Advisory Committee (BESAC), in a series of scientific community reports and studies. Details of the MaRIE concept are being further developed with potential users.

Science Complex

Over the years, the Laboratory has described plans for a Science Complex to provide new mission-related basic and applied science facilities and to facilitate removal of aging and deteriorating space. The amount of aging facility space, much of which will be eliminated as the Science Complex becomes operational, exceeds the amount of new space planned for the Science Complex. The need for the Science Complex remains and increases in urgency as facilities supporting mission-related work continue to age. The Laboratory is continuing to explore alternative financing methods to support science facilities in addition to traditional funding mechanisms, such as Congressional Line-Item funding and GPP funding. For the purpose of this TYSP, specifically as it relates

to the attachments, the Science Complex is assumed to be a third party lease.

The Science Complex, as currently envisaged, will consist of two buildings, one for classified work and one for unclassified work, totaling up to 450,000 gsf. The complex will house up to 1,600 scientific staff members from across the Laboratory, supporting both NNSA and non-NNSA national security missions as noted in Section 3.1.2. This new multidisciplinary, cost effective state-of-the-art infrastructure will seek LEED Gold certification. The Laboratory is preparing a detailed operating lease proposal package for NNSA review in FY09.

Energy Programs

Because energy security, carbon emission reduction, and climate modeling will remain significant national and DOE priorities, energy programs are anticipated to be of ongoing importance. The Laboratory will continue to play a leading role in nuclear energy through R&D in such areas as modeling and simulation, fuels and materials research, nuclear data, repository science and issues of waste from R&D, nonproliferation and safeguards, and the proposed MTS at LANSCE.

Until replacement facilities can be developed, Wing 9 of CMR will need to remain in operation to support NE as well as environmental, NNSA, and other activities.

Laboratory facilities will also continue to contribute to other aspects of energy security programs, including:

- modeling of energy infrastructure
- alternative energy sources
- fuel cell research, innovation, and development
- research and analysis for carbon storage and sequestration
- technologies for fossil fuels and energy efficiency

The Laboratory was recently selected to lead the DOE's Center of Excellence for Chemical