Facilities Subcommittee Report

SCAC Facilities Subcommittee

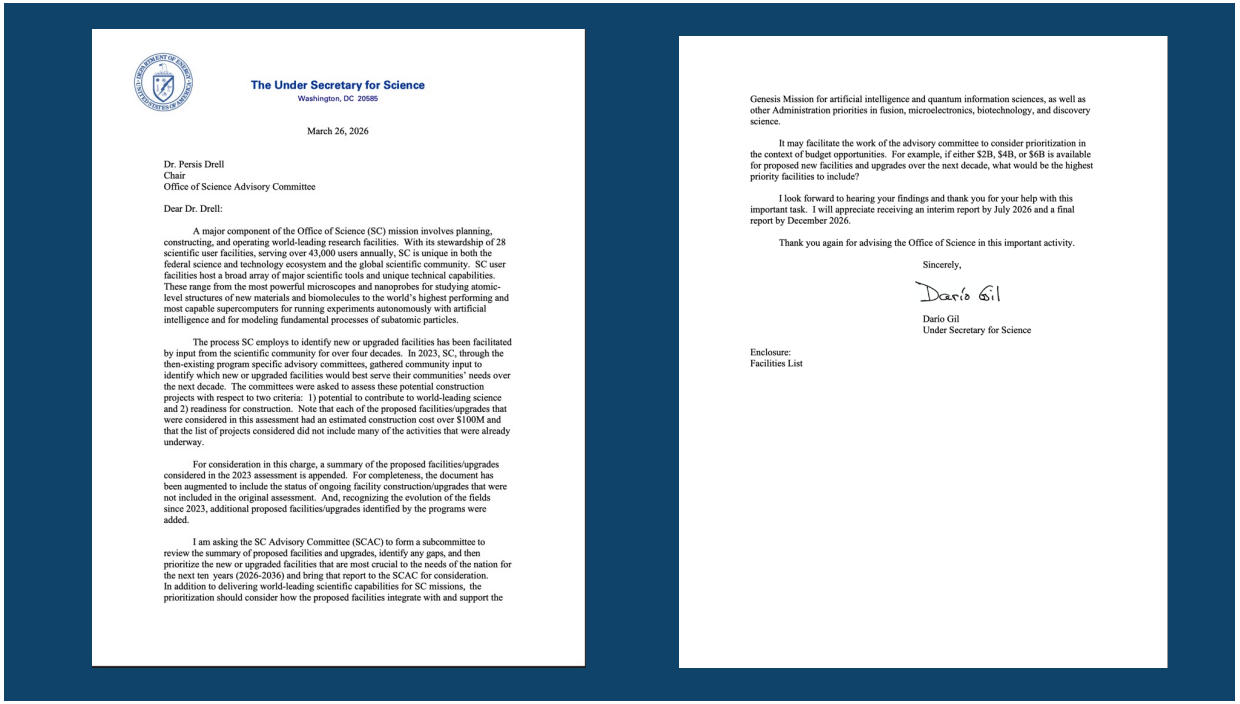
Nov. 12, 2026

U.S. DEPARTMENT of ENERGY | Office of Science

Overview: What we will cover

1. Charge
2. Membership
3. Process
4. Programmatic Context
    a) ASCR including
        a) SI for Science
        b) Quantum
    b) BER
    c) BES
    d) FES
    e) HEP
    f) NP
5. **The Roadmap**
6. SCAC Discussion
7. Process Improvements for the Future
    a) Infrastructure investments
    b) Balancing Project/Operations/Research
    c) Effective facility planning and project phasing
    d) MIE strategy
    e) Preserving core capabilities
    f) Future Discipline Specific Strategic Planning
8. SCAC Discussion

1. Facilities Subcommittee Charge



The Under Secretary for Science
Washington, DC 20585

March 26, 2026

Dr. Persis Drell
Chair
Office of Science Advisory Committee

Dear Dr. Drell:

A major component of the Office of Science (SC) mission involves planning, constructing, and operating world-leading research facilities. With its stewardship of 28 scientific user facilities, serving over 43,000 users annually, SC is unique in both the federal science and technology ecosystem and the global scientific community. SC user facilities host a broad array of major scientific tools and unique technical capabilities. These range from the most powerful microscopes and nanoprobes for studying atomic-level structures of new materials and biomolecules to the world's highest performing and most capable supercomputers for running experiments autonomously with artificial intelligence and for modeling fundamental processes of subatomic particles.

The process SC employs to identify new or upgraded facilities has been facilitated by input from the scientific community for over four decades. In 2023, SC, through the then-existing program specific advisory committees, gathered community input to identify which new or upgraded facilities would best serve their communities' needs over the next decade. The committees were asked to assess these potential construction projects with respect to two criteria: 1) potential to contribute to world-leading science and 2) readiness for construction. Note that each of the proposed facilities/upgrades that were considered in this assessment had an estimated construction cost over $100M and that the list of projects considered did not include many of the activities that were already underway.

For consideration in this charge, a summary of the proposed facilities/upgrades considered in the 2023 assessment is appended. For completeness, the document has been augmented to include the status of ongoing facility construction/upgrades that were not included in the original assessment. And, recognizing the evolution of the fields since 2023, additional proposed facilities/upgrades identified by the programs were added.

I am asking the SC Advisory Committee (SCAC) to form a subcommittee to review the summary of proposed facilities and upgrades, identify any gaps, and then prioritize the new or upgraded facilities that are most crucial to the needs of the nation for the next ten years (2026-2036) and bring that report to the SCAC for consideration. In addition to delivering world-leading scientific capabilities for SC missions, the prioritization should consider how the proposed facilities integrate with and support the Genesis Mission for artificial intelligence and quantum information sciences, as well as other Administration priorities in fusion, microelectronics, biotechnology, and discovery science.

It may facilitate the work of the advisory committee to consider prioritization in the context of budget opportunities. For example, if either $2B, $4B, or $6B is available for proposed new facilities and upgrades over the next decade, what would be the highest priority facilities to include?

I look forward to hearing your findings and thank you for your help with this important task. I will appreciate receiving an interim report by July 2026 and a final report by December 2026.

Thank you again for advising the Office of Science in this important activity.

Sincerely,

Dario Gil
Under Secretary for Science

Enclosure:
Facilities List

2027–2036
PLANNING HORIZON

The subcommittee's report will help shape the Office of Science's next decade of major facility investments.

2. Membership of the Facilities Subcommittee

Persis S. Drell
Stanford University

Tammy Ma
Lawrence Livermore National Lab

Ed Seidel
University of Wyoming

Derek Sutherland
Realta Fusion

Cynthia Friend
Kavli Foundation

Mayly Sanchez
Florida State University

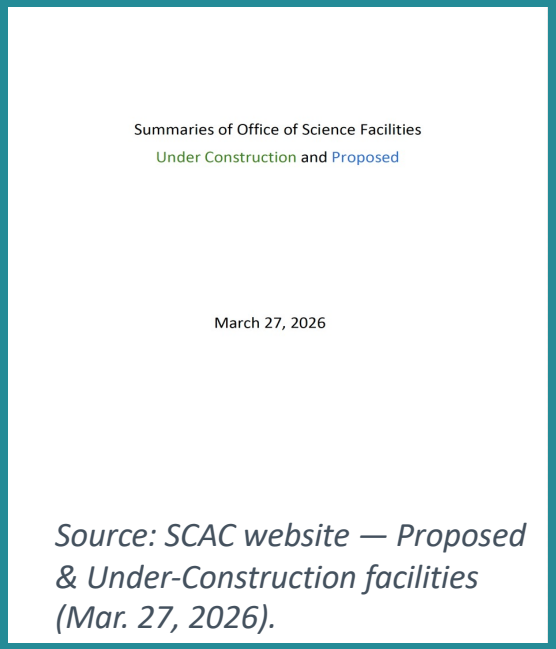
A.N. Sreeram
Dow (Retired)

Bindu Nair
DOE, Designated Federal Official

Hannibal Joma
DOE (Retired)
Subject matter Expert

3. Process - Scope

- A document on the SCAC website lists projects under construction and proposed. The subcommittee focused on proposed projects. We were also invited to identify gaps.
- Our Charge suggests: *It may facilitate the work of the advisory committee to consider prioritization in the context of budget opportunities. For example, if either $2B, $4B, or $6B is available for new facilities and upgrades over the next decade, what would be the highest-priority facilities to include?*


Summaries of Office of Science Facilities

Under Construction and Proposed

March 27, 2026

Source: SCAC website — Proposed & Under-Construction facilities (Mar. 27, 2026).

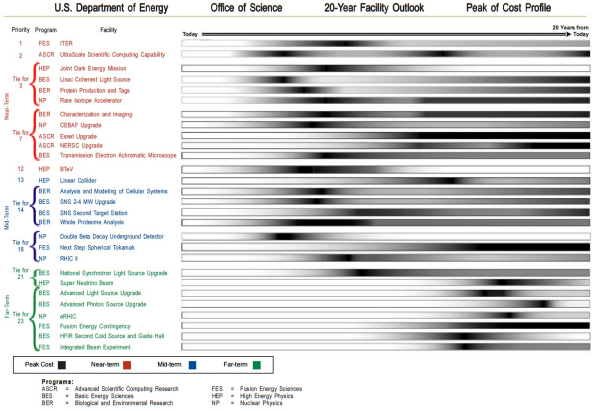
3. Process - Scope

- As previously stated, projects listed as 'Under Construction' will **NOT** be delayed to start new projects. Our roadmap prioritization only includes 'Proposed' projects
- We are **NOT** removing projects from the list of proposed projects provided by DOE. Our assignment is to recommend prioritization of the projects to be initiated in the next decade.
  - We were invited to identify gaps
- SCAC makes recommendations to the leadership of the Office of Science.
- Decisions are made by DoE and the appropriators in Congress

3. Process - History

- Previous decadal roadmaps for SC: 2003 updated in 2007





Four Years Later: An Interim Report
Facilities for the Future of Science:
A Twenty-Year Outlook
August 2007



www.science.doe.gov

Status of Facilities in 20-Year Outlook

By the end of FY 2008

	Priority	Program	Facility		R&D	Conceptual Design	Engineering Design	Construction	Operation
Near-Term	1	FES	ITER						
	2	ASCR	UltraScale Scientific Computing Capability						
	Tie for 3	HEP	Joint Dark Energy Mission						
		BES	Linac Coherent Light Source						
		BER	Protein Production and Tags	Bioenergy Research Centers*					
		NP	Rare Isotope Beam Facility (previously RIA) #						
	Tie for 7	BER	Characterization and Imaging	Bioenergy Research Centers*					
		NP	CEBAF Upgrade						
		ASCR	ESnet Upgrade						
		ASCR	NERSC Upgrade						
		BES	Transmission Electron Aberration Corrected Microscope						
	12	HEP	BTeV #		Terminated				
	13	HEP	International Linear Collider						
Mid-Term	Tie for 14	BER	Analysis/Modeling of Cellular Systems	Bioenergy Research Centers*					
		BES	SNS 2-4 MW Upgrade						
		BES	SNS Second Target Station						
		BER	Whole Proteome Analysis	Bioenergy Research Centers*					
	Tie for 18	NP/HEP	Double Beta Decay Underground Detector						
		FES	Next-Step Spherical Torus						
		NP	RHIC II						
	Tie for 21	BES	National Synchrotron Light Source Upgrade*						
		HEP	Super Neutrino Beam						
Far-Term	Tie for 23	BES	Advanced Light Source Upgrade						
		BES	Advanced Photon Source Upgrade						
		NP	eRHIC or eLIC or Electron Ion Collider						
		FES	Fusion Energy Contingency						
		BES	HFIR Second Cold Source and Guide Hall						
		FES	Integrated Beam-High Energy Density Physics Experiment						

75-100% 50-75% 25-50% > 0% complete

3. Process - Definitions

- We are making recommendations on facilities priorities for the coming decade: **2027-2036**
- We will also make some comments about the next decade: **2037-2046**

- We are asked to recommend priorities for facilities for construction
- We considered cost but we are not making budgets for SC

Priorities ≠ Budgets

3. Process – Input Gathering

*Federal Advisory Committee Act

Sources of Input:

- FACA* prioritization reports from 2023 & Fusion Science and Technology Roadmap
- Discussions with former FACA chairs and facility prioritization leads
- Meetings with Associate Directors across the Office of Science
- Input from SCAC subcommittees (Genesis & Quantum)
- Meetings with users
- Conversations with lab directors
- Webinar Town Hall
  - 685 Attending
  - 91 Papers submitted
  - 33 Talks
- Full day in person retreat in Chicago O'Hare Airport for final prioritization discussions

3. Process – Rubric for Evaluation

Note: Rubric was not used to determine final priority ranking



High Moderate Low

Illustrative scoring — format only.

3. Process – Discussion Focused on:

Breadth and depth of scientific impact

The ability to accelerate discovery across the national program

Urgency of the science

New disruptive technologies

International Landscape

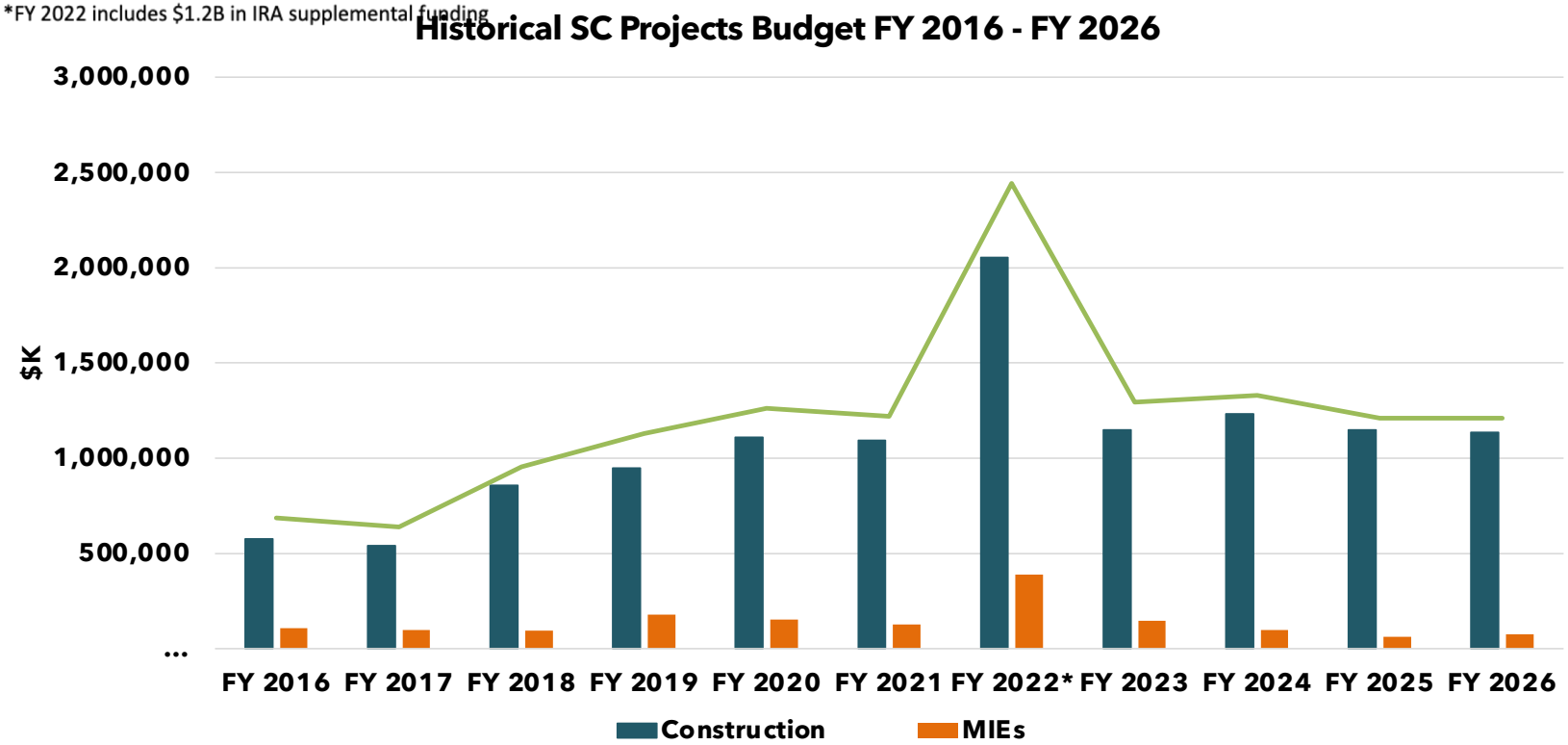
Opportunity costs to SC programs

Executing a project at a certain time precludes other investments across the office of science

Delaying a project will increase costs

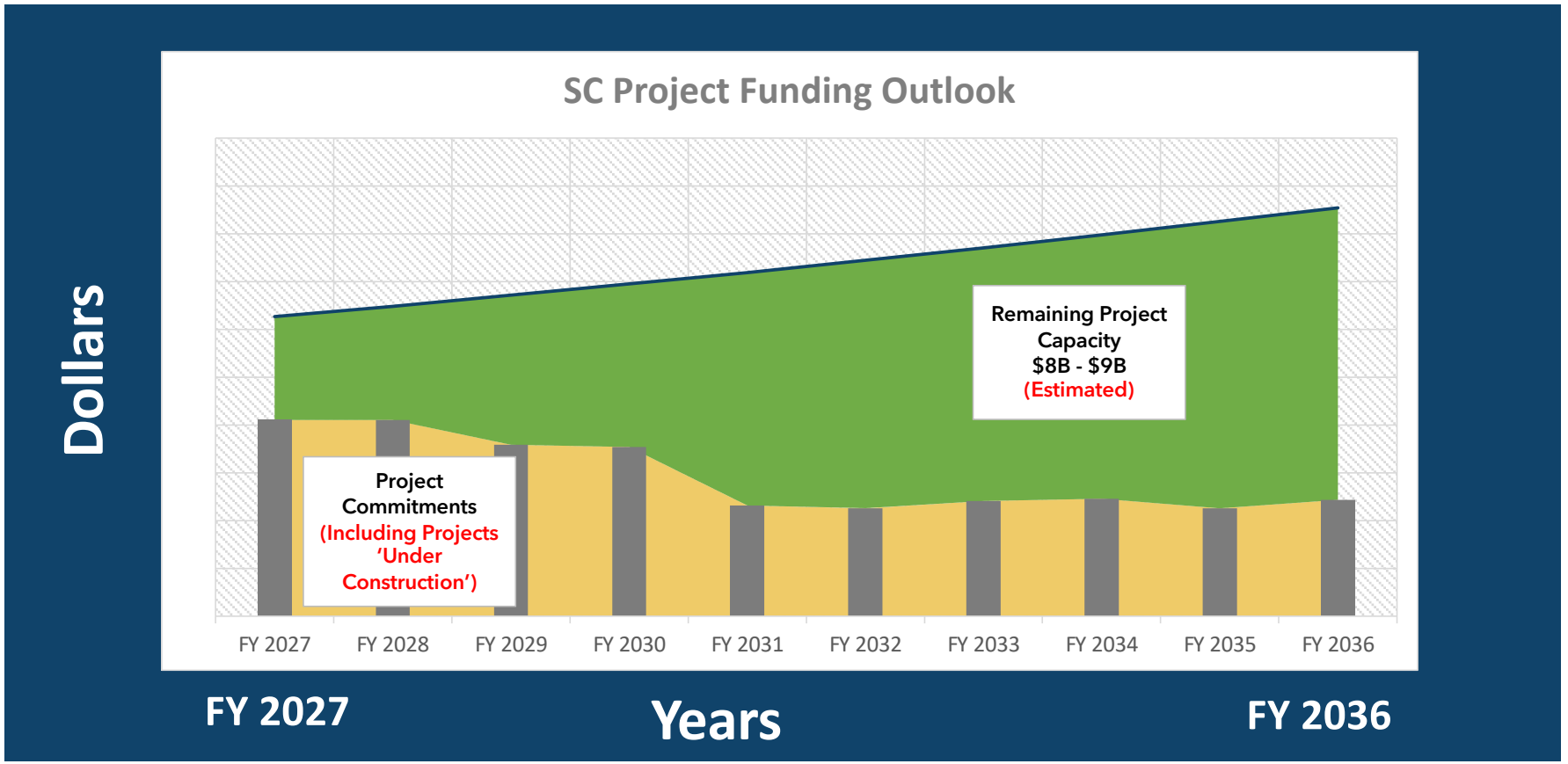
3. Process – Available Resources Historical

*FY 2022 includes $1.2B in IRA supplemental funding



*FY 2022 includes $1.2B in IRA supplemental funding

3. Process – Available Resources Projected



5. Roadmap Prioritization Categories

1. **Decadal Priority Urgent**: Disruptive opportunities where it is urgent to act and invest.
2. **Decadal Priority Near Term**: Projects that have important science and/or broad impact that we should move on now.
3. **Decadal Priority Mid Term**: Projects that have important science and/or broad impact that we should move on by mid-decade.
4. **Decadal Priority Longer Term**: Projects that have important science and/or broad impact for which additional information is needed to reduce risk, and/or available resources limit initiation this decade
5. **Next Decade**: Projects to be considered for the next decade (2037 – 2046)

Limit to ~$9B

As resources are available

4. Programmatic Context: The Big Picture

- **The mission of DOE's Office of Science is to deliver scientific discoveries and major scientific tools to transform our understanding of nature and advance the energy, economic, and national security of the United States.**
  - Office of Science sponsors research at hundreds of universities, national laboratories, and other institutions across the country.
  - Office of Science also builds and maintains a vitally important array of large-scale scientific facilities at the DOE national laboratories

- **Our subcommittee's recommendations are crafted to support this mission for the decade to come.**

4. Programmatic Context: Two Pillars for World-Leading Science

SC's mission is to deliver scientific discoveries and the major scientific tools that make them possible. This roadmap rests on two pillars that must advance together.

Harness SI for Discovery

- The Genesis Mission calls for a new age of SI-accelerated discovery, with the national laboratories at its center.
- U.S. leadership in SI for science is a national priority; SC facilities, computing, and data make it possible

Deliver Data for Discovery

- America's lead in scientific data was built over decades of investment in SC facilities and must be sustained.
- The science questions of the next decade require measurements we do not yet have; the SC facilities are key to deliver these data.

SI is only as powerful as the data behind it, and the data only as good as the facilities that produce it. Investing in both is how SC delivers world-leading science.

4. Programmatic Context: Challenges

- Many high impact high-priority fields are evolving rapidly
  - Some urgent projects are in the early stages of design

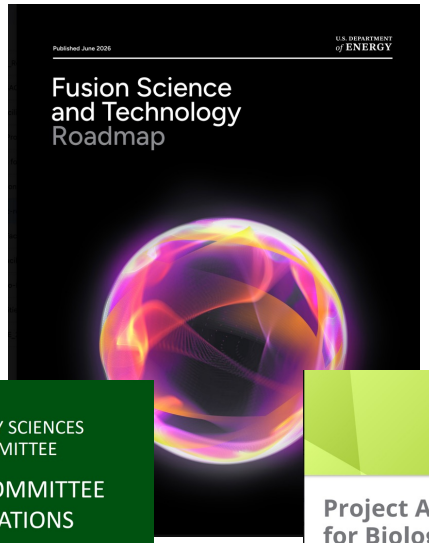
- It is critical that investments in SI are balanced by investments in conventional facilities.

- We received significant input that research budgets are eroding in the Office of Science

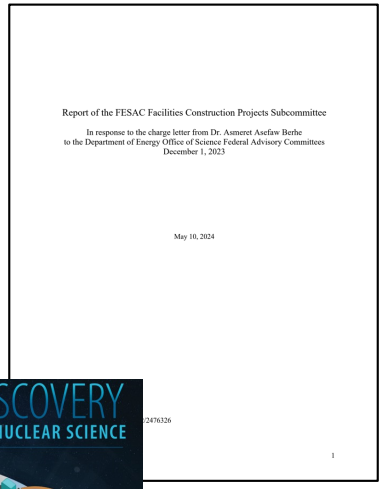
- We explicitly did not include laboratory stewardship in our prioritization considerations.
  - We leave this challenge to the Office of Science

4. Programmatic Context: Input



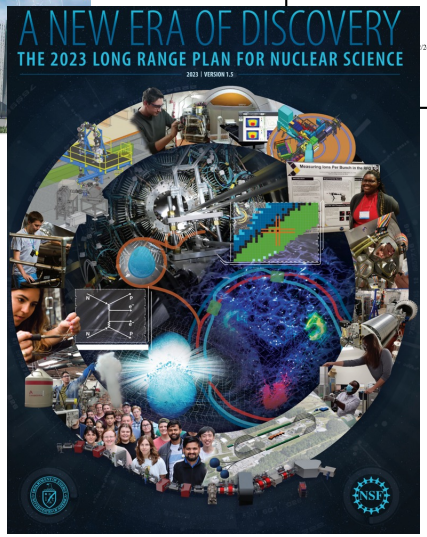












4. Programmatic Context

- The FACA reports were the foundation for our work, with facilities ranked by disciplinary experts as:
  - Absolutely Central
  - Important
  - Lower Priority
  - Don't know enough yet
- Facilities considered 'absolutely central' by the FACA committees were the focus of our subcommittee and appear on the road map with the following special cases:
  - Many ASCR projects that are ranked 'absolutely central' are traditionally upgraded on ASCR operations funding. They do not appear on our facilities road map, but we strongly endorse the continued support and upgrading of these projects through the ASCR budget.
  - A set of smaller projects (NSLS-II Experimental Tools, User Facility Capability Enhancements, Blanket Component Test Facility, IFE Beamlet Test Facility, High Rigidity Spectrometer) are bundled into an MIE line and so don't appear individually on the roadmap.

4. Programmatic Context: ASCR

- ASCR facilities form an integrated ecosystem absolutely essential to the DOE mission.
- Traditionally these facilities are upgraded on the ASCR operations budget; we strongly support that process continuing.
- **Proposed:** next-generation upgrades
  - Leadership Computing Facility Upgrades
    - Oak Ridge Leadership Computing Facility (OLCF-6)
    - Argonne Leadership Computing Facility (ALCF-4)
  - National Energy Research Scientific Computing Center-10 (NERSC-10)
  - Energy Sciences Network (ESnet7)
- Because these facilities and their upgrades are supported on the ASCR operations budget, we do not include the upgrades on our facilities roadmap.

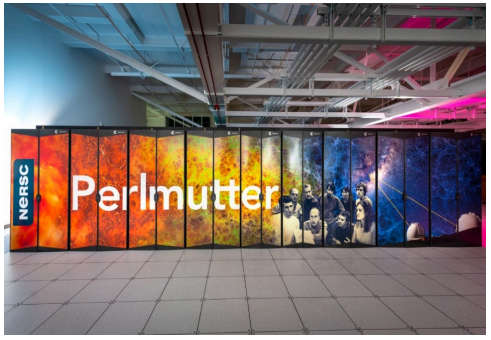
Existing ASCR user facilities



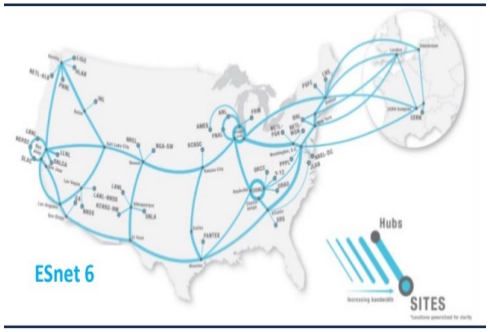
OLCF-5: Frontier (ORNL)



ALCF-3: Aurora (ANL)



NERSC-9: Perlmutter (LBNL)

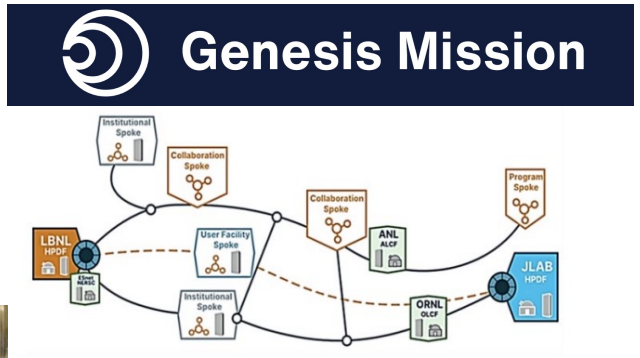


ESnet6 (LBNL)

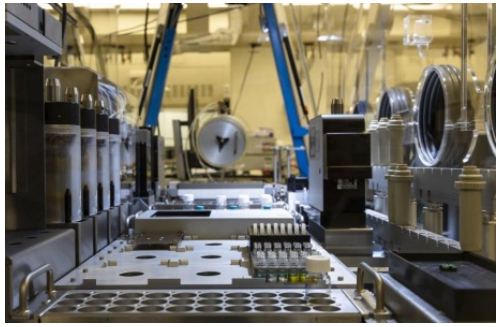
4. Programmatic Context: ASCR

- **Proposed:** Facilities that cannot be accommodated in the ASCR operations budget are prioritized on the roadmap.
- SuperIntelligence (SI) for Science
  - Delivers the Genesis Mission compute, software, algorithms and data for SC research, including the High Performance Data Facility (HPDF).
- User Facilities Automation Recapitalization (SC-wide)
  - Upgrades automation, data acquisition and networking at the 24 experimental and observational user facilities to fully SI-enabled infrastructure.
- Quantum Computing User Facility
  - Integrates quantum computing into the SC computing ecosystem once technology and system milestones are met.

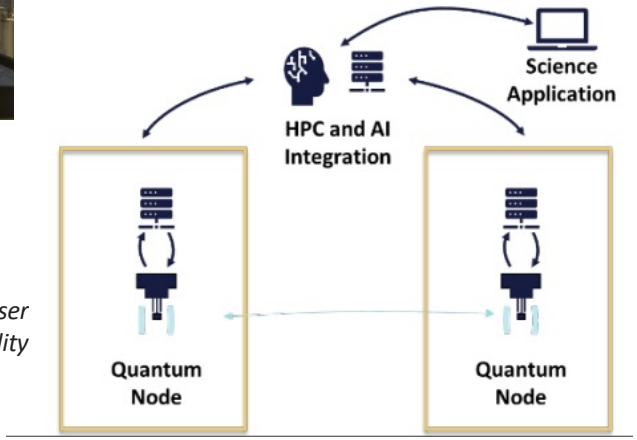
SuperIntelligence (SI) for Science, including HPDF



User Facilities Automation Recapitalization (SC-wide)



Quantum Computing User Facility

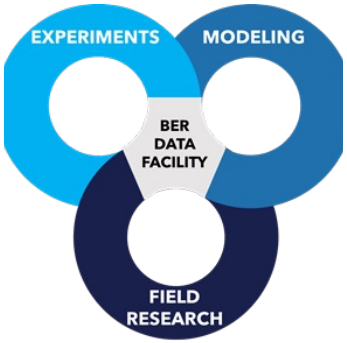


4. Programmatic Context: BER

- **Under Construction:** Microbial Molecular Phenotyping Capability (M2PC)
- **Proposed:**
  - Bio-data Nexus
    - Delivers curated, SI-ready data, analytics and models
  - Complex biosystems transformation capability (PTC)
    - Improves and automates genetic modification for production of fuels, chemicals and materials from domestic feedstocks
  - Drizzle, Aerosol and Cloud Observation chamber (DRACO)
    - Aerosol and cloud chamber central for next decade
  - Integrated mobile field facility
    - Network of automated field instruments and sensors
    - Concepts still in development

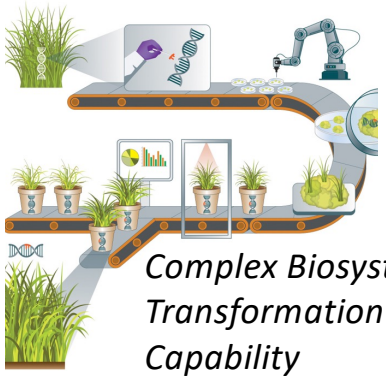


M2PC

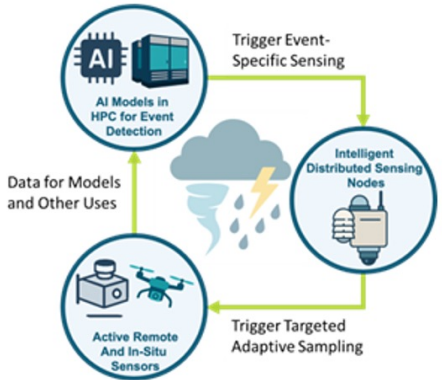


Bio-data Nexus





Complex Biosystems Transformation Capability



Integrated Mobile Field Facility

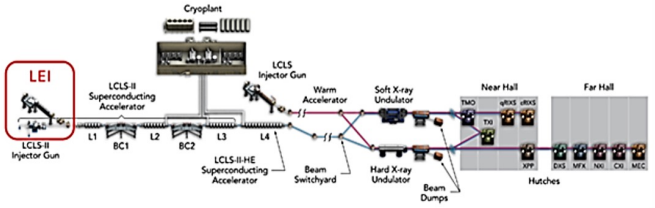
4. Programmatic Context: BES

- **Under Construction**
  - ALS-U, APS-U, LCLS-II-HE, PPU
- **Proposed**
  - Second Target Station (STS)
    - Intense cold neutrons for quantum applications
  - LCLS-Low Emittance Injector (LEI)
    - Allows full exploitation of LCLS-II-HE energy range with MHz rep rate
  - NSLS-II-U
    - Multi-bend achromatic upgrade to deliver world leading tender x-rays
  - Included in SC-wide MIE
    - User facility capability enhancements
    - NSLS-II Experimental Tools (NEXT-III)

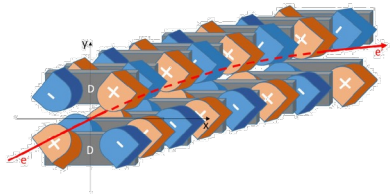
Second Target Station



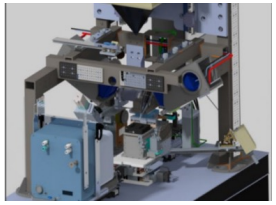
Linac Coherent Light Source (LCLS) Low Emittance Injector

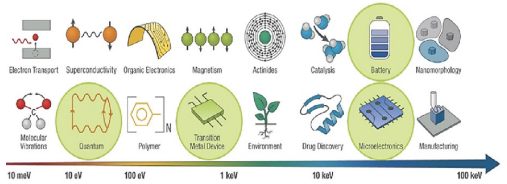


National Synchrotron Light Source-II Upgrade & Experimental Tools



User Facility Capability Enhancements

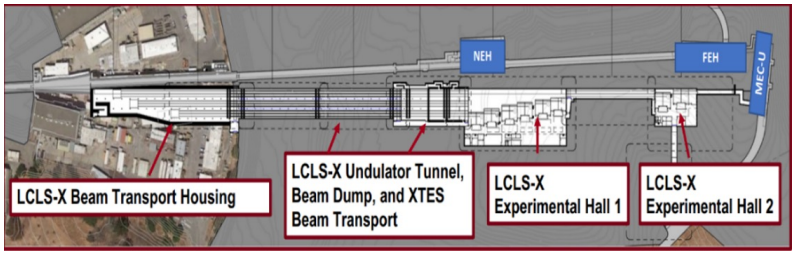




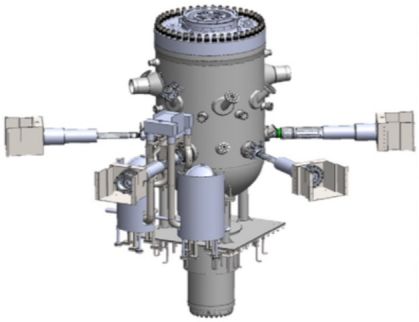
4. Programmatic Context: BES

- **Proposed**
  - LCLS-X
    - Expands capability and capacity of the Linac Coherent Light Source (LCLS)
  - Pressure Vessel Replacement @ HFIR (PVR)
    - Critical in the decade of the 2040's for isotope production
  - Next Gen Characterization Facility
    - Explore science driven strategies for the next generation of material probes

LCLS-X



HFIR Pressure Vessel Replacement



Next Gen Characterization Facility



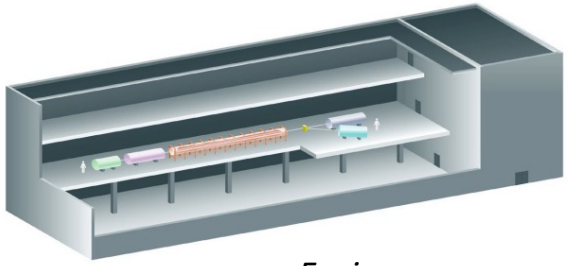
4. Programmatic Context: FES

Under Construction

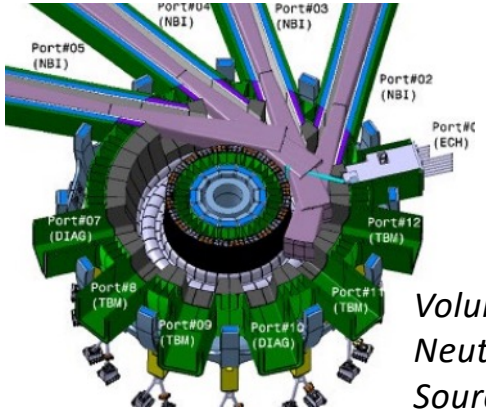
- International Thermonuclear Experimental Reactor (ITER)
- Material Plasma Exposure eXperiment (MPEX)

Proposed

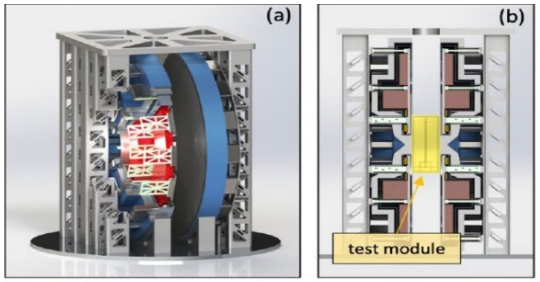
- Fusion Neutron Source (FPNS and/or VNS)
  - A high intensity neutron source to qualify materials for use in the extreme nuclear environment of fusion power plants
- *Included in SC-wide MIE*
  - Blanket Component Test Facility (BCTF)
    - to mature fusion blanket components and subsystems
  - Beamlet Test Facility (IFE-BT)
    - to mature driver, target and injection technologies



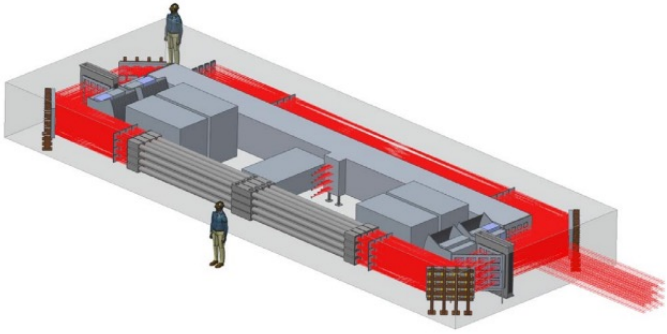
Fusion Prototypical Neutron Source (FPNS)



Volumetric Neutron Source (VNS)



Blanket Component Test Facility (BCTF)



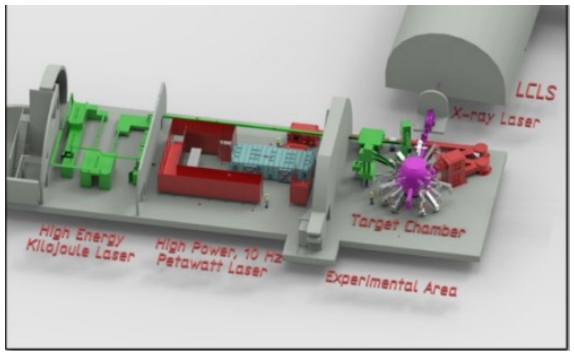
IFE Beamlet Testbed (IFE-BT)

4. Programmatic Context: FES

Proposed

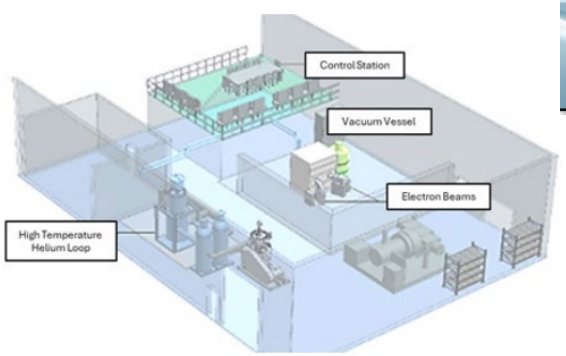
- Materials in Extreme Conditions Petawatt Upgrade (MEC-U)
  - LCLS end station upgrade for studies of high energy density science
- Integrated Blanket and Fuel Cycle Test Facility (IBF-CTF)
  - Test Facility to de-risk fusion blanket and fuel-cycle technologies using prototypical neutron and tritium environments
- Nuclear High Heat Flux (NHHF)
  - Test Facility to evaluate how materials react under extreme heat loads in a fusion device

MEC-U



IBF-CTE





NHHF

4. Programmatic Context: HEP

- **Under Construction**
  - Proton Improvement Plan (PIP-II)
  - Long Baseline Neutrino Facility/Deep Underground Neutrino Experiment (LBNF/DUNE) Phase 1
- **Proposed**
  - Future Circular Collider (FCC)
    - US contributions to a Future Energy Frontier Collider
  - LBNF/DUNE Phase 2
    - Third DUNE Far Detector (FD3)
    - Accelerator Complex Evolution (ACE-MIRT)
    - DUNE More Capable Near Detector (MCND)

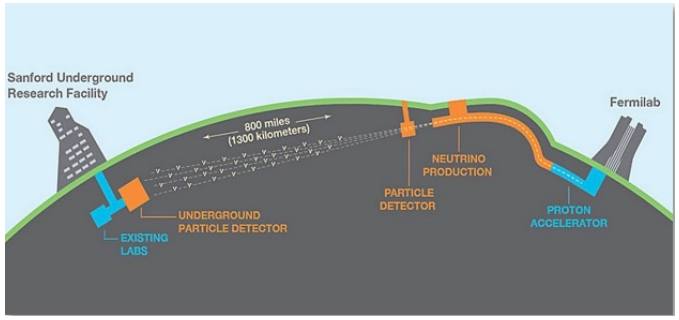
LBNF/DUNE Third Detector (FD3)



Future Circular Collider (FCC)



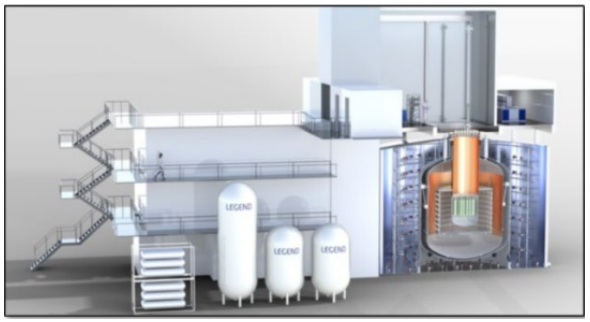
LBNF/DUNE Complex



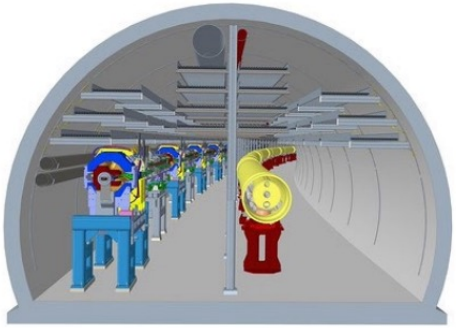
4. Programmatic Context: NP

- **Under Construction**
  - Gamma Ray Energy Tracking Array (GRETA)
  - Measurement of a Lepton-Lepton Electroweak Reaction (MOLLER)
- **Proposed**
  - Large Enriched Germanium Experiment for Neutrino-less Double Beta Decay (LEGEND-1000)
    - Ton-scale experiment to establish whether the neutrino is its own antiparticle
  - Electron Ion Collider (EIC)
    - Explore the origins of proton mass and spin
  - Ton-Scale Neutrino-less Double Beta Decay
    - Additional ton-scale experiments to observe neutrino-less double beta decay
  - *Included in SC-wide MIE*
    - High Rigidity Spectrometer (HRS) to expand capabilities at FRIB

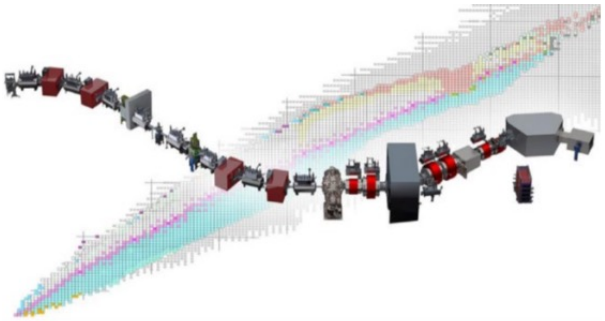
Legend-1000



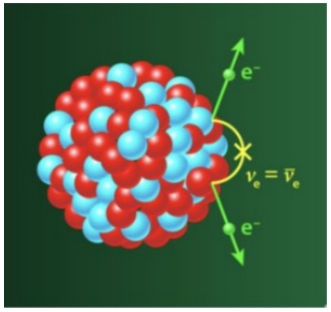
Electron Ion Collider (EIC)



High Rigidity Spectrometer (HRS)



Ton-Scale Neutrino-less Double Beta Decay



5. Roadmap Prioritization Categories

1. **Decadal Priority Urgent**: Disruptive opportunities where it is urgent to act and invest.
2. **Decadal Priority Near Term**: Projects that have important science and/or broad impact that we should move on now.
3. **Decadal Priority Mid Term**: Projects that have important science and/or broad impact that we should move on by mid-decade.
4. **Decadal Priority Longer Term**: Projects that have important science and/or broad impact for which additional information is needed to reduce risk, and/or available resources limit initiation this decade
5. **Next Decade**: Projects to be considered for the next decade (2037 – 2046)

Limit to ~$9B

As resources are available

5. Roadmap Recommendations: Urgent

Decadal Priority Urgent: *Disruptive opportunities where it is urgent to act and invest.*

- **SI for science including HPDF**
- **Quantum Computing User Facility[1]**
- **Fusion Neutron Source (FPNS and/or VNS)[2]**
- **SC-Wide User Facilities Automation Recapitalization**

Roadmap Notes

1. **Quantum Computing User Facility** – Milestones must be met demonstrating technical maturity and scientific relevance before this should move forward
2. **Fusion Neutron Source** – We recommend a competition for consortia to propose designs that meet the technical needs and that the DOE investment in this facility be limited to less than $1B. DOE should only support 50% of the operating costs. The remainder of the construction and operations funding should come from private partnerships

5. Roadmap Recommendations: Near Term

Decadal Priority Near Term: *Projects that have important science and/or broad impact that we should move on now.*

- **Second Target Station (STS)**
- **US Contribution to Future Circular Collider (FCC)**
- **LEGEND-1000 Double Beta Decay**
- **Low Emittance Injector (LEI) for LCLS**
- **Bio-Data Nexus**
- **Complex Biosystem Transformation Capability (PTC)**

5. Roadmap Recommendations: Mid Term

Decadal Priority Mid Term: *Projects that have important science and/or broad impact that we should move on by mid-decade.*

- **NSLS-II-U**
- **SC-Wide MIE including:**
  - NEXTIII
  - User Facility Capability Enhancements
  - Blanket Component Test Facility
  - Inertial Fusion Energy -Beamlet Test Facility
  - High Rigidity Spectrometer

5. Roadmap Recommendations: Longer Term

Decadal Priority Longer Term: *Projects that have important science and/or broad impact, but additional information is needed to reduce risk, and/or available resources limit initiation this decade*

- **Electron Ion Collider (EIC)**
- **LBNF/DUNE Third Detector (FD3)[3]**
- **Matter in Extreme Conditions Petawatt Upgrade (MEC-U)**
- **Integrated Blanket and Fuel Cycle Test Facility (IBF-CTF)**
- **LCLS-X**
- **DRACO**

Roadmap Notes

3. **LBNF/DUNE Third Detector** – Moving forward with the third detector (FD3) later in this decade is contingent on progress with phase 1.

5. Roadmap Recommendations: Next Decade

Next Decade: Projects to be considered for the next decade (2037 – 2046)

- **Pressure Vessel Replacement (PVR)[4]**
- **Next Generation Characterization Facility**
- **Nuclear High Heat Flux Test Facility(NHHF)**
- **Integrated Mobile Field Facility**
- **Cosmic Frontier[5]**
- **Completion of Phase 2 LBNF/DUNE[6]**
- **Ton-Scale Neutrino-less Double Beta Decay**

Roadmap Notes

4. **Pressure Vessel Replacement @HFIR** – The pressure vessel must be replaced to ensure continued service to critical missions in isotope production, neutron activation, materials irradiation and neutron scattering. We recommend this as the highest priority new facility in the next decade.
5. **Cosmic Frontier** – Community input identified a gap in the proposed list of facilities and upgrades. We considered the FACA recommendations in this area and included the Cosmic Frontier on the roadmap in the next decade.
6. **Completion of LBNF/DUNE Phase 2** – There were three elements to complete LBNF/DUNE Phase 2. We prioritized FD3 for later in this decade. We recommend completion of LBNF/DUNE in the next decade. Initial facility performance will inform the completion strategy.

5. Roadmap Recommendations: Summary

Decadal Priority Urgent
SI for science including HPDF
Quantum Computing User Facility [1]
Fusion Neutron Source[2]
SC-Wide User Facilities Automation Recap
Decadal Priority Near Term
Second Target Station
US Contribution to Future Circular Collider
LEGEND-1000
Low Emittance Injector for LCLS
Bio-Data Nexus
Bio Transformation Capability(PTC)

Decadal Priority Mid Term
NSLS-II-U
SC-Wide MIE
Decadal Priority Longer Term
Electron Ion Collider
LBNF/DUNE FD3[3]
MEC-U
IBF-CTF
LCLS-X
DRACO

Next Decade
Pressure Vessel Replacement[4]
Next Gen Characterization Facility
Nuclear High Heat Flux Test Facility
Integrated Mobile Field Facility
Cosmic Frontier[5]
Phase 2 LBNF/DUNE Completion[6]
Ton-Scale Neutrino-less Double Beta Decay

Roadmap Notes

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3. **LBNF/DUNE Third Detector** – Moving forward with the third detector (FD3) later in this decade is contingent on progress with phase 1.
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6. SCAC Discussion



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7. Process Improvements for the Future

Investments in Infrastructure

- DOE-SC Infrastructure portfolio is worth nearly $32B
  - Investment in infrastructure is an important priority
- Support DoE's rigorous, strategic prioritization approach to investments in Science Lab Infrastructure
  - Couple SLI investments to major scientific project priorities and research

Balancing Projects, Facility Operations, and Research

- We heard consistent concerns about the level of funding support for research
- Assessing opportunity costs of new projects including cost of operations is vital input to any prioritization process
- The workforce of the future is primarily developed with the support of research funding

7. Process Improvements for the Future

Effective Facility Planning/Project Phasing

- Consider pursuing fewer large projects on technically limited schedules rather than funding limited schedules
- Invest more in R&D pre-CD-0 to reduce risk and avoid overly conservative designs
- Include more robust peer review in CD-0 process
- Consider full costs of a facility, including operations, to achieve stated science goals and evaluate opportunity costs to the field before CD-2
- Breaking large science projects into multiple smaller phases with intermediate science goals is a valuable strategy. However, it is the full cost to reach the science goals that is relevant in prioritizing projects and evaluating their opportunity costs.

Major Items of Equipment

- A robust MIE funding line allows flexibility in prioritization between fields and over time for smaller projects
- Projects especially well suited for MIE support were
  - NEXT-III
  - User Facility Capability Enhancements
  - BCTF
  - IFE-BT
  - HRS

7. Process Improvements for the Future

Preserving Core Capabilities– Accelerator R&D

- Many projects in SC rely on innovations in particle accelerators
- It is important to invest in accelerator R&D across all technical domains including intense proton beams with high-field magnets, muon beams that require rapid capture and acceleration of muons within their short lifetime, electron and positron beams with wake-field acceleration.
- A shared SC-wide accelerator R&D strategy is needed
- R&D needs to be coordinated across the SC laboratory complex

Strategies for Future Discipline Specific Strategic Planning

- Our work relied critically on the FACA committees: HEPAP, NSAC, FESAC, BESAC, BERAC and ASCAC
- In January 2027, SCAC will create 5 standing subcommittees made of SCAC members and external subject matter experts to provide disciplinary expertise and advice to SCAC and SC leaders

SCAC Discussion



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Final Comments



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Final Comments

- Our process relied on input from the scientific community
  - Preserve those channels for the future
- This roadmap is a snapshot in time
  - As opportunities emerge and change, consider reviewing on a cadence more frequent than 20 years!
- Tremendous thanks to all the people who contributed to our work:
  - Former FACA committee and subcommittee members
  - ADs in the Office of Science
  - Members of SCAC
  - Members of the scientific community

The End



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