# Facilities and Project Management Division COV – Presentation of Charge

Office of Nuclear Physics (NP) September 12, 2024

Paul Mantica



#### **Committee of Visitors**

- NSAC has used subcommittees, Committees of Visitors (COV), to assess the
  efficacy and quality of the processes used to solicit, review, recommend,
  monitor, and document funding actions and to assess the quality of the
  resulting portfolio.
- For this year, the Acting Director of the Office of Science has charged NSAC to assemble a COV to assess the Facilities and Project Management Division (FD) of the Office of Nuclear Physics (NP).
- The typical COV review cycle is once every three to five years. NP was last reviewed in 2019.
- Each COV is composed of a group of recognized scientists and research program managers with broad expertise in the designated program areas.
  - Members are familiar with DOE research programs; however, a fraction of a typical COV membership does not receive DOE funding.



## COV Charge to NSAC, August 19, 2024 [1]



U.S. Department of Energy National Science Foundation



August 19, 2024

Chair, DOE/NSF Nuclear Science Advisory Committee College of Sciences Old Dominion University 4600 Elkhom Avenue Norfolk, Virginia 23529

This letter requests that the Nuclear Science Advisory Committee (NSAC) assemble a Committee of Visitors (COV) to review the management processes of the Department of Energy (DOE) Office of Science's Office of Nuclear Physics (NP) Facilities & Project Management Division (FD). The panel should provide an assessment of the processes used to solicit, review, recommend, and document proposal actions and monitor active projects and programs for both the DOE laboratory and university programs.

The panel should assess the operations of the Office's FD program during the fiscal years 2019 through 2024. The panel may examine any files from this period for all actions administered by the program for the period under review, including funding at national laboratories, universities, and other activities handled by the NP FD. The panel should consider and provide evaluation of the following major elements:

- the efficacy and quality of the processes used to solicit, review, recommend, monitor, and document application, proposal, and award actions; the efficacy and quality of the processes to monitor facility operations and active
- the quality of the resulting portfolio, including its breadth and depth, and its
- national and international standing.

In addition to these findings, comments on observed strengths or deficiencies in any component or sub-component of the Division's portfolio and suggestions for improvement would be very valuable. The panel should also comment upon what progress has been made towards addressing action items related to NP FD from the previous COV review. You should work with the Associate Director of the Office of Science for Nuclear Physics to establish the processes and procedures. The results of this assessment should be documented in a report with findings, comments, and recommendations clearly articulated; the report should be submitted to NSAC for consideration in the Fall meeting in 2025.

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- (a) the efficacy and quality of the processes used to solicit, review, recommend, monitor, and document application, proposal, and award actions;
- (b) the efficacy and quality of the processes to monitor facility operations and active projects; and
- (c) the quality of the resulting portfolio, including its breadth and depth, and its national and international standing.



## COV Charge to NSAC, August 19, 2024 [3]



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August 19, 2024

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#### **COV Report 2019**

- Previous COV reports for NP are available online:
  - https://science.osti.gov/DDSP/Committees-of-Visitors/NP-COV
- Five recommendations were made to NP by the COV in 2019:
  - 1. It is urgent that the Research Division director position be filled within a year. The Research Division director is imperative for the health of the NP office and the community it serves. The division directors, in conjunction with the AD, are essential to lead new initiatives aligned with national priorities.
  - 2. The COV recommends that the NP leadership develop a succession plan for the entire office. This plan needs to mitigate the risk involved in the potential loss of critical staff in the office.
  - 3. In addition to filling the current vacancies, the office should bring on board an additional scientist to support the nuclear theory program.
  - 4. The office should continue their efforts to increase diversity and inclusion in the community of PIs and those supported by their grants. Such a process should be informed by data to the extent possible.
  - 5. The COV recommends that the Office of Science maintain the strong relationship between the Office of Nuclear Physics and the U.S. research community through the Nuclear Science Advisory Committee.
- NP concurred with the five recommendations in a response available at the link above.



## **Progress on 2019 COV Recommendations [1]**

1. It is urgent that the Research Division director position be filled within a year. The Research Division director is imperative for the health of the NP office and the community it serves. The division directors, in conjunction with the AD, are essential to lead new initiatives aligned with national priorities.

A Research Division Director is in place effective January 2024.

- 2. The COV recommends that the NP leadership develop a succession plan for the entire office. This plan needs to mitigate the risk involved in the potential loss of critical staff in the office. NP is fully staffed for the first time In ~15 years. Detail and IPA positions are being leveraged to manage succession planning. Well defined processes have mitigated staff transitions.
- 3. In addition to filling the current vacancies, the office should bring on board an additional scientist to support the nuclear theory program.
  - The nuclear theory program is currently supported by one full time program manager, with backup support from two other research program managers. A program manager for nuclear physics computing was hired, who supports the theory topical collaborations and SciDAC.



### **Progress on 2019 COV Recommendations [2]**

- 4. The office should continue their efforts to increase diversity and inclusion in the community of PIs and those supported by their grants. Such a process should be informed by data to the extent possible.
  - NP initiated the traineeship program that has evolved to the SC Initiatives RENEW and FAIR to enhance efforts to increase diversity and inclusion.
- 5. The COV recommends that the Office of Science maintain the strong relationship between the Office of Nuclear Physics and the U.S. research community through the Nuclear Science Advisory Committee.
  - NP continues to work constructively with NSAC, most recently demonstrated through the 2023 LRP process.

#### Facilities and Project Management Division: People

#### Facilities & Project Management Division

Paul Mantica, Director
Saryna Cameron, Program Support Specialist (CONTR)

Advanced Technology R&D

Manouchehr Farkhondeh, Deputy

Nuclear Physics Facilities
David Cinabro

Nuclear Physics Major Initiatives
Ivan Graff

Nuclear Physics Instrumentation Elizabeth Bartosz

Industrial Concepts
Michelle Shinn

Outreach
Michael Famiano

Michael Famiano Latifa Elouardrhiri (Detailee)



















# Facilities and Project Management Division: Scope (Approximate Annual Funding)

- Facility Operations (~\$400 million)
  - Four SC User Facilities: ATLAS, CEBAF, FRIB, and RHIC
- Projects (~\$100 million)
  - One line-item construction project: EIC
  - Four major items of equipment: GRETA, HRS, MOLLER, and TS-NLDBD
- Advance Technology R&D (~\$12 million)
  - AI/ML, managed through biennial targeted funding opportunity
  - Accelerator R&D, managed through biennial targeted funding opportunity
- Industrial Concepts (~\$10 million)
  - SBIR/STTR, managed through annual funding opportunities (Phase I and Phase II)
  - Microelectronics, managed through laboratory FWPs
  - EIC-related Generic Detector R&D, managed through open call
- International Engagement and Outreach



#### **Next Steps**

- As stated in the charge letter:
  - NSAC should work with the Associate Director of the Office of Science for Nuclear Physics to establish the processes and procedures.
  - A report should be submitted to NSAC for consideration in the Fall meeting in 2025.
- The Facilities and Project Management Division stands ready to support NSAC and the COV subcommittee in addressing the charge.