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# Summary

Ken Stanfield

Fermilab

March 17, 2004

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# Priority Setting

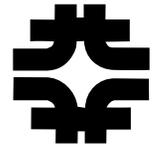
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- Is Laboratory management effectively setting priorities, ...
  - Program priorities set by director in consultation with PAC, AAC, LRPC, SAG , HEPAP, DOE HEP
  - Priorities for resource allocation set in budget process:
    - Annual Div/Sect Budget (&program) Reviews
  - Regular meetings with Div/Sect Head individually and as a group, regular meetings of directors, and associate directors with Div/Sect heads.

# Tracking

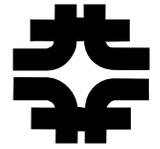
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- ... tracking progress, resolving problems ...
  - Project, program tracking and oversight
    - Director's reviews & OPMO
    - PMGs & project reports
    - Program specific oversight meetings
  - Fermilab Self Assessment Program
    - Including peer reviews
  - URA BoO
    - Visiting committee
    - Issues oriented subcommittees
  - DOE reviews

# Communicating

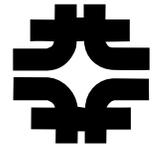
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- ...and communicating with key stakeholders?
  - Our employees
  - DOE
  - Our users
  - National and international HEP Community
  - Neighbors and local Illinois Community

# Resources

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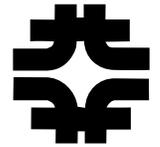
- Are resources sufficient and appropriately allocated with a proper mix of skill sets and optimized to meet the stated mission, goals and objectives?
  - At this review you have heard about:
    - how program has been curtailed to match reduced resources. Next slide
    - our current skill set, manpower allocation.
    - current and planned allocation of resources.
    - management approach to allocation of resources.



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- Programs curtailed, eliminated or rejected
    - Muon collider R&D curtailed
    - Run IIb Silicon upgrades eliminated
    - KAMI rejected
    - CKM not recommended by P5
    - 2<sup>nd</sup> Arm for BTeV
    - FINESSE, a booster neutrino experiment
    - MINOS emulsion R&D proposal
  - Additions to program since MiniBooNE ('98): remaining scope of Run IIb upgrades, BTeV and LC R&D

# Risks

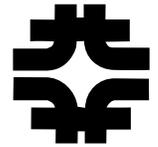
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- Are there any programmatic, technical and infrastructure risks?
  - Utility and technical infrastructure
  - Run II design goals are very challenging
  - Run II detector longevity
  - Neutrino program proton goals are challenging
  - Maintaining a well qualified technical workforce is an ongoing challenge
  - Health of programs in declining resource scenarios, future outlook, accelerator R&D.
- Laboratory planning includes mitigation of identified risks.

# Self-Assessment

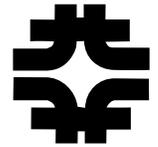
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- Is there an ongoing program of self-assessment aimed at continuously improving maintenance and operations?
  - Assessment Program Goals
    - Aligned with President's Management Agenda, Hamre Commission Findings & Secretary of Energy's Letter
    - Measures and Metrics
      - Relate to Management Systems
      - Contract Metrics are Few in Number
      - Emphasis on Science done Safely
      - Measures Emphasize Improvement

# Self-Assessment

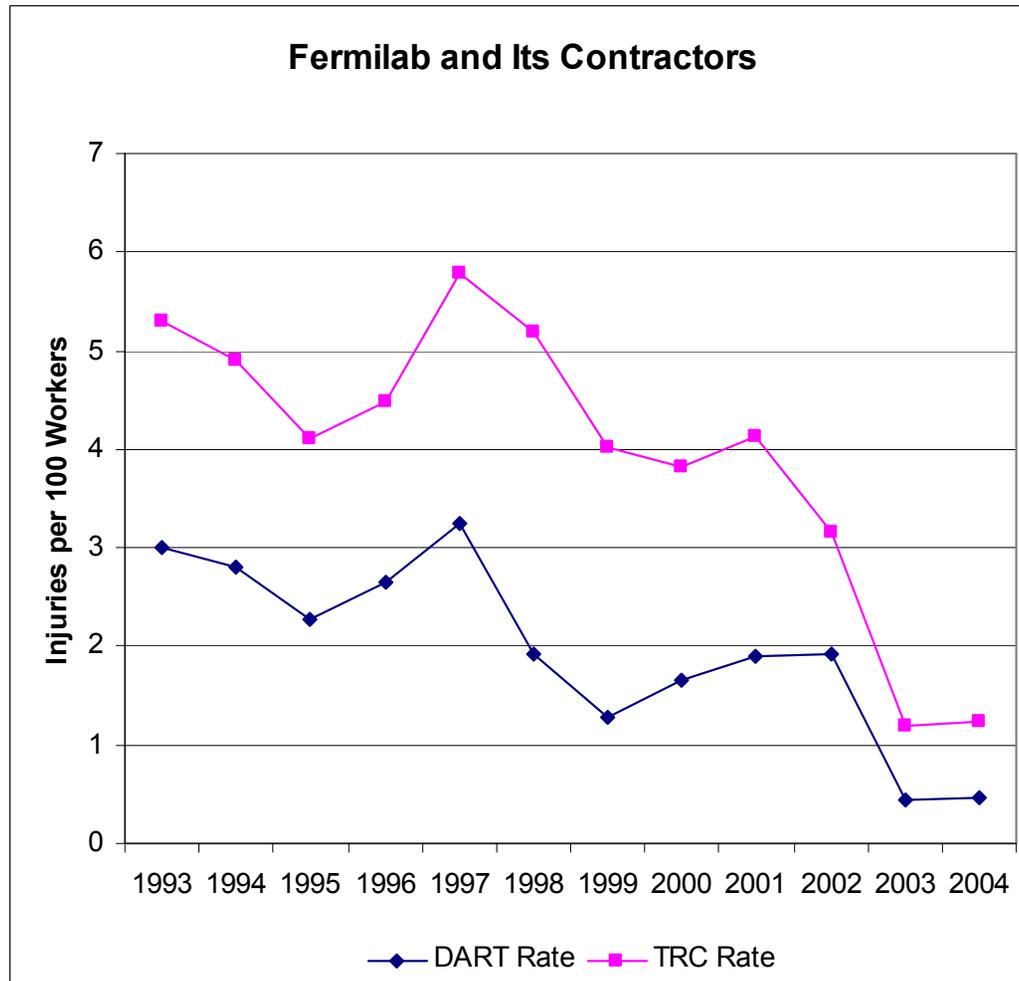
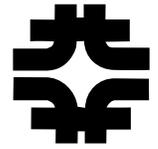
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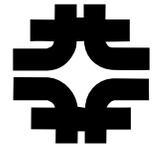


- Methodology
  - Peer Review: it is in our culture, it is the evaluation method of choice
  - Assessments are Performed by System owners
  - Self-assessment itself is Peer Reviewed
- Outcomes
  - Used as a Management Tool
  - Identifies Opportunities for Improvement
  - Fosters Continuous Improvement
- Future
  - Continue Improvement of the Self-Assessment Process in Partnership with Fermi Area Office

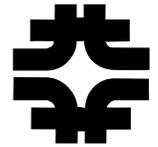


- Is ES&H planning and implementation receiving appropriate attention?
  - Yes,
    - Injury rates are at their lowest level ever (lost time, reportable, and first aid) \*\*
    - Management actively reviews (weekly) leading (training statistics, walkthroughs) and trailing indicators (incident cases and property losses).
    - Management assures that ES&H receives priority within tight budgets -- when setting budgets; when scheduling activities such as shutdowns and construction.





- Instructions to employees have been very specific about the importance of ES&H over schedule. “If it can’t be done safely then it does not get done.”
- Environmental management systems are in place as evidenced by our assessment last year. Budget is available to ship rad waste to Hanford rather than store on-site.



- NuMI taught us some hard lessons in managing the work of subcontractors safely.
  - ES&H support to the Project Manager
  - Subcontractor implementation of ISM and hazard analyses
  - Special training for project phases (eg installation)
  - Only one message is communicated through the Construction Manager who serves as a single point of contact.



- ISM is very active and effective at Fermilab
  - Ongoing assessments by Div/Sections (6 of 8 are complete). Part of tripartite assessment process.
  - These assessments show that Employees at all levels of the line accept and practice safety as a line management responsibility.
  - Employees interviewed in these assessments affirm that management at all levels supports ES&H and encourages planning work so that it can be performed safely.
  - ES&H is considered as a formal part of the performance appraisal process.



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- Tasks involving radiation continue to be well planned so that exposures are ALARA. Everyone understands the importance of this with Neutrino programs and increasing collider luminosity.
  - Safety committees are well staffed and active.
- 
- We have a robust ES&H program at Fermilab.

# Conclusion

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- After spending two days with us we hope that you have concluded that:
  - This is a well managed laboratory,
  - we have made the tough decisions to trim the programs of the laboratory to match declining budgets,
  - we have identified the risks to success and have planned their mitigation,
  - we are meeting our commitments,
  - and with more resources we would deliver more science.



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- Backup Transparencies



**Table 1**  
**Director' Reviews**  
**March 1, 2003 – March 15, 2004**

Director's Review of NuMI Installation	KCS/ OPMO	Director's Review 4/ 8/ 2003 - 4/ 9/ 2003
Fermilab Cyber Security Peer Review	Directorate/ Computing Div.	Director's Review 4/ 22/ 2003- 4/ 23/ 2003
Director's Review of Run II Accelerators	Holmes/ Tigner	Director's Review 5/ 5/ 2003 - 5/ 7/ 2003
Director's Review of MINOS/ CDMS Soudan Mine Operations	KCS/ OPMO	Director's Review 5/ 14/ 2003 - 5/ 15/ 2003
Director's Review of Run II Luminosity	OPMO/ Holmes	Director's Review 7/ 1/ 2003 - 7/ 3/ 2003
Director's Review of Run II Computing	HM/ Prog Planning	Director's Review 9/ 11/ 2003- 9/ 12/ 2003
Director's Review of BTeV CD-1	KCS/ OPMO	Director's Review 10/ 21/ 2003- 10/ 23/ 2003
Director's Review of Run II Luminosity	Holmes/ OPMO	Director's Review 1/ 20/ 2004- 1/ 22/ 2004
Director's Review of NuMI Installation	KCS/ OPMO	Director's Review 2/ 12/ 2004 – 2/ 13/ 2004
Director's Review of BTeV Interaction Region	KCS/ OPMO	Director's Review 2/ 18/ 2004- 2/ 19/ 2004



**Table 2**  
**Project Management Group Meetings**

Collider Detector Facility (CDF) PMG	HM/ Directorate CDF Management	As Scheduled
CMS Project Management Group (PMG)	KCS/ CMS Management	Monthly
DZero PMG	HM-Directorate-DZero Management	As Scheduled
BTeV Working Group (PMG) Meeting	KCS/ OPMO	B-Weekly
CMS Software and Computing PMG	HM/ CMS S&C Project	Bi-Monthly
NuMI Project Management Group (PMG) Meeting	KCS/ Directorate/ NuMI Mgmnt	Monthly
Run II Accelerator PMG Meeting	SH/ Directorate	Monthly



**Table 3**  
**Department of Energy Reviews**  
**March 1, 2003 – March 15, 2004**

Fermilab Annual Program Review	FNAL Directorate and Staff	DOE Review 3/ 18/ 2003- 3/ 20/ 2003
US LHC Detector Maintenance & Operations Evaluation Group(MEG) Review	V. Luth/ M.Tuts/ E. O'Brien/ M. Selen	DOE Review 4/ 8/ 2003-4/ 10/ 2003
DOE Review of CMS (at BNL)	D. Lehman	DOE Review 5/ 19/ 2003- 5/ 21/ 2003
DOE Review of NuMI	D. Lehman	DOE Review 5/ 28/ 2003- 5/ 30/ 2003
DOE Assessment of the Run II Luminosity Plan at the FNAL Tevatron	D. Lehman	DOE Review 7/ 21/ 2003 - 7/ 23/ 2003
DOE Lab Property Management Assessment	J. Alleva, SC-64/ BLC/ J. Brown	DOE Review 8/ 18/ 2003 - 8/ 22/ 2003
DOE Mini Review of TeV II Luminosity Upgrades	D. Lehman	DOE Review 10/ 8/ 2003
US LHC Accelerator Project Review	D. Lehman	DOE Review 10/ 15/ 2003 - 10/ 16/ 2003



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DOE Review of Run II Luminosity	D. Lehman	DOE Review 2/ 24/ 2004- 2/ 26/ 2004
DOE Review of Tevatron Operations	D. Lehman	DOE Review 3/ 16/ 2004- 3/ 18/ 2004
DOE/ NSF LHC Joint Oversight Group Meetings	KCS	Three Times/ Year



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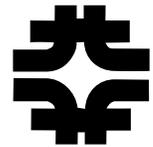
**Table 4**  
**URA Oversight**

Run II Advisory Council	URA-MW-Directorate	As Scheduled
URA Board of Overseers Meeting	URA-FNAL	3 times a Year
URA Council of Presidents	URA-Washington, DC	Annual
URA Visiting Committee Meeting	URA-Directorate	Annual
URA Administrative Peer Review	URA-Directorate	Annual



**Table 5**  
**Fermilab Management**

Ecological Land Management	FNAL Staff	Monthly
Run II Operations Meeting	AD-S. Holmes	3 times per week
Division/ Section Budget Reviews	Directorate	Annual
Laboratory Training Committee Mtg.	KCS- Lab Training Subcommittee	As Scheduled
Run II Task Force	MW	As scheduled
Scientific Advisory Committee Meeting	MW/ Scientific Staff	Bi-Weekly
Division Heads Meeting	Directorate-Division Heads	Bi-weekly
Run II Coordination Mtg.	AD-S. Holmes	Daily
Run II Strategy Meeting	SH/ AD/ Scientific Staff	Monthly
Laboratory Administrative Meeting	BLC/ Directorate/ Staff	Monthly
Section Heads Meeting	Directorate-Section Heads	Monthly
All Directors Meeting	Directors	Monthly
Project Management (DOE 413.3) Coordination Mtg.	KCS-Directorate	Monthly
Task Managers & Construction Coordination Meeting	Jed Brown	Monthly
Lab Safety Committee Meeting	ES&H	Monthly
Performance Measures Meetings	Directorate	Ongoing
ES&H Executive Committee Meetings	ES&H-Directorate	Ongoing
Senior Safety Officers Meeting	ES&H	Ongoing
Performance Appraisal System Training	LS- Training	Training
Project Accounting Meetings	Budget Office/ Divs and Secs	Training on WB - Task Numbers
NuMI Project Status Meeting	KCS, NuMI Management	Weekly
Experiment Scheduling Meeting	Prog Planning/ Scientific Staff	Weekly



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Run II Upgrade Status Meeting	SH/ AD/ Scientific Staff	Weekly
Scientific Director's Meetings	MW,KCS,HM,SH	Weekly
Run II Steering Committee Meeting	AD-S. Holmes	Weekly
Physics Advisory Committee Meeting	PAC/ Directorate/ Division Heads	3 Times Yearly
Muon Technical Advisory Committee Meeting	Directorate/ AD	Annual
Fermilab Accelerator Advisory Committee Meeting	Directorate/ AD	Bi-Annual
Sloan Digital Sky Survey Advisory Council Meeting	KCS – SLOAN AAC Members	Bi-Annual



**Table 6**  
**Stakeholder Communication**  
**With Employees**

Director's Talk to Fermilab Engineers	MW	Annual
Employee Health and Fitness Day	Human Resources	Annual
Employee Performance Recognition Award	Directorate	As Nominated
Fermilab Today-Director's Corner	MW-Public Affairs	Ongoing
Safety Recognition Award Program	ES&H-Directorate	Ongoing
Employee Milestones Program	Directorate	Ongoing
National Engineer's Week	FNAL Directorate and Staff	Annual
Eola Road Meeting	KCS/ J. Brown/ J. Jackson	6/ 11/ 2003 Status/ Press concern
Employee Years of Service Awards	Directorate-Human Resources	10,20,25, 30, and 35 service year
Fermilab Webpage <a href="http://www.fnal.gov">www.fnal.gov</a>	Public Affairs	Ongoing
Fermilab Today Publication	Public Affairs	Daily
Ferminews	Public Affairs	Monthly



**Table 7**  
**Stakeholder Communication**  
**With DOE**

National Laboratories Improvement Council	DOE- BLC Member	4 times/ Year
Luminosity Teleconference - Status/ Issues	M. Procario(DOE)-Directorate	As Scheduled
Teleconference with Robin Staffin Program Status/ Issues	Robin Staffin- FNAL Directors	As Scheduled
Financial Management Systems Improvement Council	DOE - BLC Member	Twice Yearly
DOE Business Managers Meeting	DOE - BLC Attends	Twice Yearly
Luminosity Briefing for J. Decker - Forrestal	M. Witherell	2/ 10/ 2003
Teleconference with J. Decker/ - Milt Johnson Project Management Manual - DOE 413.3	MW-Lab Directors	3/ 31/ 2003
Visit to Fermilab by R. Orbach and J. Salmon Fermilab Tour and Luminosity Briefing	MW - Directorate	4/ 28/ 2003
Robin Staffin Colloquium to Fermilab Staff	Robin Staffin	5/ 10/ 2003
Milt Johnson -Site Visit and Tour of NuMI Tunnel/ Safety Operations	MW - Directorate	5/ 15/ 2003
Eola Road Site Visit - Safety Walkthrough	Jane Monhart, Jed Brown, Rod Walton	7/ 30/ 2003
Eola Road Meeting with FAO	J. Brown, Jane Monhart	9/ 11/ 2003
Tour Eola Road NuMI Site w- Jeff Salmon	KCS - Directorate	10/ 16/ 2003
FNAL Budget Briefing	Directorate/ Glen Crawford	11/ 12/ 2003 – 11/ 14/ 2003
DOE Laboratory Director's Meetings	MW	As Scheduled



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**Table 8**  
**Stakeholder Communication**  
**With Users**

All Experimenters' Meeting	Directorate- FNAL Staff and Users	Weekly
Users Facility Advisory Committee	FNAL Staff and Users	Issue Driven
Users Executive Committee Meeting	Directorate FNAL Staff and Users	Monthly
Annual Users Meeting	Fermilab Staff and Users	Yearly
Graduate Student Conference	Fermilab Users	Yearly



**Table 9**  
**Stakeholder Communication**  
**With the HEP Community**

High Energy Physics Advisory Panel (HEPAP) Meeting	MW/ HM/ SH/ KCS FNAL Panel Members	Three times per year
HEPAP P5 Panel Meeting	Commissioned Subpanel of HEPAP	3/ 26/ 2003 - 3/ 27/ 2003
Fermilab Webpage <a href="http://www.fnal.gov">www.fnal.gov</a>	Public Affairs	Ongoing
Fermilab Today Publication	Public Affairs	Daily
Ferminews	Public Affairs	Monthly
US Particle Accelerator School	FNAL/ SLAC/ CERN	Ongoing
High Energy Physics Information Center	Computing Division	Ongoing
QuarkNet – HEP Research Tool	DOE/ NSF/ Education Office	Ongoing Project
Int'l Lepton-Photon Conference	International Orgs-FNAL	8/ 14/ 2003-8/ 17/ 2003 FNAL
"Interactions.org"	International Website Various HEP contributors -Public Affairs	Daily
Fermilab Long Range Planning Committee Meetings	HM/ FNAL Staff	As scheduled

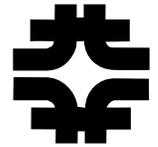


**Table 10**  
**Stakeholder Communication**  
**With Neighbors and Local Community**

Severe Weather Seminar	ES&H	Annual
Education Outreach Programs	Education Office	36 Programs
Illinois Coalition Meetings	MW and/ or KCS	4 times Yearly
Chicago Wilderness Workshops	Public Affairs	As Scheduled
St Charles School District 303 Visits	OPA-Fermilab Scientists	As Scheduled
Museum of Science and Industry Outreach Program	Public Affairs	As Scheduled
Community Task Force Activities	Public Affairs	As Scheduled
East West Corporate Corridor Association	BLC	As Scheduled
Illinois Institute of Technology Rice Campus Board of Overseers	BLC	As Scheduled
Naperville Area Chamber of Commerce	BLC	As Scheduled
Valley Industrial Association	BLC	As Scheduled
SciTech Coordination Meetings	B. Chrisman	Monthly
DuKane Valley Council Meetings	JB, BLC, Public Affairs	Monthly
Ask-A-Scientist Program	Education Office	Ongoing
Saturday Morning Physics	PPD-EPP	Ongoing
Fermilab Speakers Bureau	Public Affairs	Ongoing
Eola Road/ DuPage County Meeting	KCS/ JJ/ MW/ JB	9/ 16/ 2003 Internal Briefing
DuPage County/ Eola Road Meeting - Fermi's existing and planned facilities	KCS/ J. Monhart/ DuPage County DOT/ HTNB, Inc.	2/ 20/ 2004

# Laboratory Services Sections Reviews

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Review of Quarknet Program - March 2004

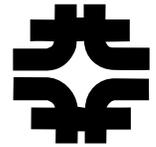
Review of entire compensation system - beginning March of 2004

GAO audit of Benefits Value Study - November 2003 - present ( periodic questions since  
November)

GAO review of Equal Employment practices for the last 10 years - Fermilab participation still  
in question, it looks probable. Initial information to be provided in March 2004.

# Business Services Section Reviews

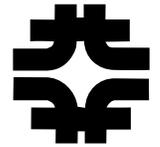
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- April 22-23, 2003 Combined Self-Assessment and Peer Review of Fermilab's Computer Security Program
- June 2003 Tripartite Assessment of the Railhead
- September 2003 DOE Operational Awareness Review
- Affirmative Procurement Practices
- October 7-10, 2003 Administrative Peer Review
- October – December 2003 KPMG LLP Financial Statement Audit
- November 2003 Inspector General Request for Information on Home Office and Contractor-Related Party Transactions (ongoing)
- November 2003 – March-2004 KPMG LLP Circular A-133 Grant Audit (ongoing)
- November 17-21, 2003 DOE Office of Science Personal Property Management Assessment of Fermilab
- November 18, 2003 Nuclear Regulatory Commission Audit of Railhead
- December 2003 Inspector General Audit on Meals, Morale and Employee-Related Expenses (ongoing)
- January 2004 Inspector General Request for Assistance with Information on Contracts/Subcontracts with Four Major Accounting Firms
- January 2004 Tripartite Assessment of the Mailroom

# ES&H Section Reviews

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The Nuclear Regulatory Commission External Regulation Review, November 18-21, 2003

The DOE Laboratory Accreditation Program (DOELAP) Review of our dosimetry program,  
December 9-10, 2003

OSHA External Regulation Assessment – March 2004.

Independent Construction safety review, Richard Hislop for FAO - March 2004

# SA Systems

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- FERMILAB MANAGEMENT SYSTEMS TO BE ASSESSED
- -
- Human Resources
- Compensation
- Benefits
- Employment
- Equal Opportunity/Counseling
- Diversity
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- Procurement
- 
- Property
- 
- Management Information Systems (MIS)
- Business Computing Systems
- -

# SA Systems

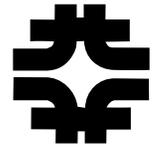
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- Financial Systems
  - Budget
  - Accounting
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- Support Services Systems
  - Legal
  - Fleet Management and Maintenance
  - Telecommunications
- Visual Media
  - Distribution
  - Warehousing
  -
- ES&H
  -
- Emergency Management Systems
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# SA Systems

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- Security
- Foreign Visits & Assignments
- Safeguards
- Property Protection
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- Project Management Systems
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- Infrastructure
  - Land Management
  - Architecture & Engineering (FESS)
  - Routine Maintenance
  - Energy Conservation
- 
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# SA Systems

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- Programmatic Operations & Maintenance
  - Accelerator Operations/Maintenance
  - Detector Operations/Maintenance
- Engineering (accelerators/detectors)
  - Magnet Design, Construction & Testing
  - Machine Shop Operations
  -
- User Support Systems
  - Accommodations
- Visas
  -
- Scientific Computing
  - Hardware Management
  - Software management
  - Network Management
  - Planning for Future Systems
  -

# SA Systems

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- Stakeholder Communications
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- Balanced Scorecards
- Human Resources
- Property
- Procurement