

<b>Subject:</b>  <b>General Plant Projects Administration</b>	<b>Effective Date:</b>  July 9, 1999	<b>Initiated by:</b>  Head, ES&H and Infrastructure Support
	<b>Supersedes:</b> Revision 0, dated June 30, 1995	<b>Approved:</b>  Director

**Applicability**

This procedure applies to all activities at C and D-Sites of the Laboratory.

**Introduction**

This procedure describes the sequential steps and responsibilities necessary for PPPL administrative control of the planning, design, and implementation of a typical General Plant Project (GPP) from inception through acceptance.

**Definition of General Plant Projects (GPPs)**

- GPPs are miscellaneous minor construction projects of a general nature, having a useful life in excess of two years, and costing in excess of \$25,000 but less than \$5,000,000.
- GPPs are necessary to upgrade and modernize facilities, structures and systems or adapt them to new uses, and to address health, fire, and safety concerns.
- GPPs provide for design, construction, renovation and restoration to land, buildings, other structures and systems.
- All modifications to existing real property meeting any of the following requirements:
  - Expansion of existing facilities that adds to the overall dimensions of the existing facility.
  - Major structural revision which changes the functional purpose for which the facility is used.
  - A complete replacement of a facility fixture which has deteriorated beyond the point of repair.
  - Work required to accommodate regulatory or other requirement changes.

(Examples include construction of new buildings, repairs to roads and parking areas, roof replacement and utility system upgrades.)

**Reference Documents**

P-077	Roles & Responsibilities for General Plant Projects
GEN-009	GPP Prioritization
ENG-006	Review and Approval of Specifications & Statements of Work
TOP 23.016	Conceptual, Preliminary, and Final Design Reviews
OP-AD-104	Preparation, Review, and Approval of D-Site Design Changes
DOE Order 430.1	Life-Cycle Asset Management
DOE Order 440.1	Worker Protection Management for DOE Federal and Contractor Employees
DOE Order 534.1	Accounting
ES&HD 5008	Environment, Safety & Health Directives Manual
ENG-010	Control of Drawings, Software and Firmware (replaces OP-AD-104 in October 1999)
ENG-032	Work Planning Procedure (replaces OP-AD-104 in October 1999)
ENG-033	Design Verification (replaces TOP 23.016 in October 1999)

**Procedure****A. Planning Phase Action  
Responsibility**

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|--------------------------------------|---|
| Head, Maintenance & Operations (M&O) | 1. Add proposed General Plant Project (GPP) to GPP List.  |
| Technical Resource Committee (TRC)   | 2. Prioritize and approve GPP project for implementation.   |
| Project Engineering                  | 3. Submit Construction Directive Request and Davis-Bacon Request to DOE-PG.   |
|                                      | 4. Submit Project NEPA Request to ES&H.   |
| ES&H                                 | 5. Review NEPA Request.   |
| Budget Office                        | 6. Open account with budget approved by DOE-PG.   |
| Project Engineering                  | 7. Prepare Statement of Work (S.O.W.) for Architect/Engineering (A/E) services , if required, in accordance with ENG-006. |
| Procurement                          | 8. Send S.O.W. to A/E.  |
|                                      | 9. Review A/E Proposal with Project Engineering.  |
| Project Engineering                  | 10. Advise Procurement to release the Purchase Order for A/E Services.  |
| Procurement                          | 11. Issue the Purchase Order for A/E Services.  |

**B. Design Phase****Responsibility****Action**

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|--------------------------|---|
| Architect Engineer (A/E) | 1. Develop A/E Design Package for proposed project, if needed.                            |
| Project Engineering      | 2. Review A/E Design Package with appropriate PPPL and DOE-PG staff.                      |
| Architect Engineer (A/E) | 3. Submit revised A/E Design Package if changes have been made as a result of the review. |

**C. Procurement Phase****Responsibility****Action**

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| Project Engineering | 1. Prepare Information Package for the RFB (Request for Bid) which includes the following: <ul style="list-style-type: none"><li>• SOW (including critical schedule milestones, required documentation submittals, and training requirements)</li><li>• Plans and specifications</li><li>• Detailed cost estimate</li><li>• Health &amp; Safety Plan requirements</li><li>• ISM (Integrated Safety Management) Plan.</li></ul> |
| Procurement         | 2. Prepare Request for Bid (RFB) document package.   |
|                     | 3. Release RFB.  |
|                     | 4. Conduct Pre-Bid meeting with prospective bidders and appropriate design review participants.  |
|                     | 5. Receive and review bids and subcontractor qualifications with Project Engineering.  |
|                     | 6. Obtain DOE award approval (if required) and forward executed subcontract to Project Engineering.  |

**D. Construction Phase****Responsibility****Action**

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| Project Engineering | 1. Initiate request for Title III Services, if required.     |
| Procurement         | 2. Issue Purchase Order for Title III services, if required. |

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| Procurement                            | 3. Obtain required bonds, insurance certificate, etc. And issue 'Notice to Proceed.'  |
| Head, Maintenance and Operations (M&O) | 4. Assign Construction Coordinator.   |
| Project Engineering                    | 5. Contact ER/WM to ensure that any applicable agency notifications (i.e., environmental) have been completed in accordance with permit requirements.   |
| ER/WM (Environmental)                  | 6. Notify agencies (e.g., NJDEP) of start of work as required by permits (e.g., for projects involving remediation etc.).   |
| Construction Manager                   | 7. Notify Lab Personnel of Work Schedule. At a minimum, notification includes the following: Facility Manager, ESU, ES&H, D-Site Shift Supervisor, DOE-PG and Information Services.<br>8. Schedule and coordinate required subcontractor 'Integrated Safety Management,' (ISM) training.  |
| Subcontractor                          | 9. Begin project.   |
| Construction Manager                   | 10. Direct construction operations.<br><br>11. Monitor project for ES&H compliance. Interface with project and support organizations (ER/WM, ES&H, etc.) as necessary.<br>12. Inform Project Engineer of significant events (i.e. events which may affect the scope of work, schedule, or cost) encountered during day-to-day operations. |
| Project Engineering                    | 13. Prepare technical documentation for Change Orders and forward to Procurement (if required).   |
| Procurement                            | 14. Send Change Order requests to Subcontractor, negotiate and agree upon final terms, as required.   |
| Project Engineering                    | 15. Submit Directive Modification requests to DOE-PG, as needed.<br><br>16. Track project schedules and work with Subcontractor to develop recovery plans, if necessary, to keep project on schedule.   |
| Subcontractor                          | 17. Complete project.   |
| Construction Manager                   | 18. Schedule a 'Walk-Through' to evaluate the quality and completeness of the project.  |

- Construction Manager      19. Generate a ‘Punch-List.’
  
- Project Engineering      20. Collect all warranties, design drawings, etc. from Subcontractor.
  
- 21. After ‘Punch-List’ resolved, Issue Final Acceptance.
  
- 22. Notify Procurement and Accounting that Construction has been completed.

**E. Closeout Phase  
Responsibility**

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|--------------------------|--|
| Architect Engineer (A/E) | 1. Make changes to ‘As-Built’ drawings and return them to Project Engineering.           |
| Project Engineering      | 2. Compile and review all drawings and documentation and forward to the Head, M&O.       |
|                          | 3. Notify Procurement and Accounting that A/E services are completed.                    |
|                          | 4. Forward FIMS data and Project Description to Accounting.                              |
| Subcontractor            | 5. Forward signed ‘Release of Claims’ to Procurement.                                    |
| Procurement              | 6. Forward Internal Order to Accounting.   |
| Accounting               | 7. Upon receipt of last Internal Order, pay Final Invoice.                               |
|                          | 8. Prepare RFBA to close project work package and forward it to the Cost Center Manager. |
| Cost Center Manager      | 9. Sign RFBA and forward to the Budget Office.   |
| Budget Office            | 10. Sign RFBA and forward to Accounting.   |
| Accounting               | 11. Close project work package.  |

12. Prepare a Preliminary Cost Report and forward it to Project Engineering.
- Project Engineering 13. Resolve any discrepancies on the Preliminary Cost Report and return it to Accounting.
- Accounting 14. Forward revised Preliminary Cost Report to DOE-PG.
- DOE-PG 15. Resolve any discrepancies on the Preliminary Cost Report and return it to Accounting.
- Accounting 16. Prepare a Final Cost Report and forward it to the Head, Maintenance and Operations.
- Head, Maintenance and Operations (M&O) 17. Sign and return Final Cost Report to Accounting.
- Accounting 18. Obtain additional signatures required on Final Cost Report and forward to DOE-PG.
- DOE-PG 19. Approve Final Cost Report and issue Project Close-Out Directive.
- Accounting 20. Update FIMS (Facility Information Management System) and MARS (Management Accounting Reporting System) financial records, as appropriate.