

5YP Preparation - Process

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- Full team (and other interested community members) participation
- Presentation(s) very early in CY25 on motivation for, and importance of NSTX-U, and how NSTX-U can contribute to Bold Decadal Vision leading to a Fusion Pilot Plant (FPP)
 - Starting point is [previous 5YP](#), but much has changed in community (focus on FPP, participation of industrial partners, ...)
 - How our Research Objectives map to FPP science and technology gaps
- Chapter Leads will then lead individual chapter discussions, and coordinate input
 - Each main Chapter will address one Research Objective (three of them)
 - Envision two, several hour Zoom meetings for each Chapter
 - Initial discussion of Research Objective and proposed priorities
 - Follow up discussion after Chapter Leads synthesize input
- Collaborators will be involved in both 5YP development and writing proposals for their own funding in parallel



- Chapter Leads write up draft chapters (with diagnostic/analysis needs, timelines for achieving research goals) and will circulate to Team and others giving input
- Chapters revised based on input received
 - Including recommendations from FESAC (Jan-Feb 2025), FES Roadmap (Q2 CY25)
- 5YP vetted to PAC
- 5YP reviewed by formal Review Committee
- Plan finalized by end of FY25

- 5YP to follow FES guidance
 - Confinement/stability/scenarios (first two Research Objectives) remain important
 - Extend Chapter 3 to development and testing of Liquid Lithium components
 - Will be important to prioritize elements of each Research Objective, and across Research Objectives, even more than before
 - Scope added to Plan, but runtime, (inflation adjusted) budgets relatively constant



- Jan. 13, 2025 (Monday Physics Mtg): Presentation on details and motivation for NSTX-U Research Objectives, how to fold in changes over past five years
- Late Jan – early Feb. 2025: Initial Chapter Zoom meetings
- Early March 2025: Second set of Chapter Zoom meetings
- Mid-Late March 2025: Prioritization across Research Objectives
- Mid April 2025: Draft of 5YP circulated to Team and other interested parties
- Mid-May 2025: 5YP plan vetted to PAC
- Late May-June 2025: 5YP revisions based on PAC input
- Summer 2025: Formal review of 5YP/Alignment with new FES Roadmap
- Late Summer/Fall 2025: Revisions of Plan based on review, input from FES
- Sept. 30, 2025: Plan finalized