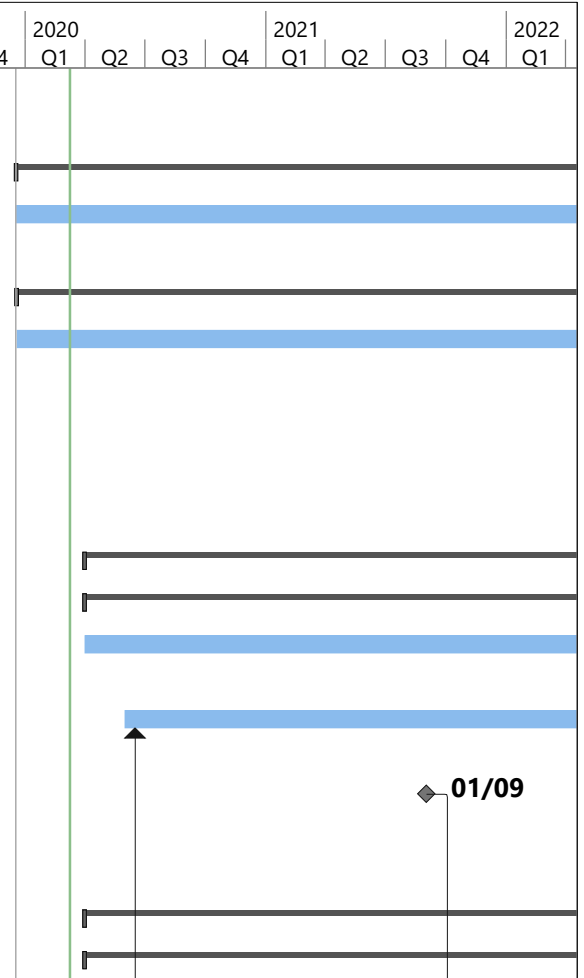


ID	Task Mode	Task Name	Duration	Start	Finish	Predecessors	2020		2021				2022					
							Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	
1		LhARA Stage 1 construction	480 days	Wed 07/06/23	Tue 08/04/25	53												
2		LhARA Stage 2 construction	1200 days	Wed 25/09/24	Tue 01/05/29	15												
3		Radiobiology	2584 days	Thu 19/12/19	Tue 13/11/29													
4		Radiobiology at partner faci	1320 days	Thu 19/12/19	Wed 08/01/25													
5		Radiobiology at LhARA	1200 days	Wed 09/04/25	Tue 13/11/29	1												
6		System/near clinical aspects	2583 days	Fri 20/12/19	Tue 13/11/29													
7		Pre-LhARA: in collaboration with RFI SnL theme and other partners	1320 days	Fri 20/12/19	Thu 09/01/25													
8		LhARA: in collaboration with RFI SnL theme and other partners	1200 days	Wed 09/04/25	Tue 13/11/29	1												
9		LhARA 5yr R&D plan	1200 days	Wed 01/04/20	Tue 05/11/24													
10		Facility design	1170 days	Wed 01/04/20	Tue 24/09/24													
11		Development of conceptual design	960 days	Wed 01/04/20	Tue 05/12/23													
12		Development of technical design	1100 days	Mon 01/06/20	Fri 16/08/24	50												
13		CDR (detailed for Stage 1	0 days	Wed 01/09/21	Wed 01/09/21													
14		TDR Stage 1	0 days	Tue 09/05/23	Tue 09/05/23	25												
15		TDR Stage 2	0 days	Tue 24/09/24	Tue 24/09/24	14FS+360 days												
16		Stage 1 R&D	1200 days	Wed 01/04/20	Tue 05/11/24													
17		Gabor lens prototypes	720 days	Wed 01/04/20	Tue 03/01/23													



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Task		Inactive Summary		External Tasks	
Split		Manual Task		External Milestone	
Milestone		Duration-only		Deadline	
Summary		Manual Summary Rollup		Progress	
Project Summary		Manual Summary		Manual Progress	
Inactive Task		Start-only			
Inactive Milestone		Finish-only			

ID	Task Mode	Task Name	Duration	Start	Finish	Predecessors	2020				2021				2022	
							Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
18		1st Gen	720 days	Wed 01/04/20	Tue 03/01/23											
19		2nd Gen	720 days	Wed 01/04/20	Tue 03/01/23											
20		Electron density measurements	240 days	Wed 26/05/21	Tue 26/04/22	18SS+300 days										
21		Alpha source and detector tests	150 days	Wed 27/04/22	Tue 22/11/22	20										
22		Laser-driven source	1200 days	Wed 01/04/20	Tue 05/11/24											
23		Laser-capture interface	720 days	Wed 01/04/20	Tue 03/01/23											
24		Investigation of space charge algorithms	240 days	Wed 01/04/20	Tue 02/03/21											
25		Stage 1 beam line performance evaluation	90 days	Wed 04/01/23	Tue 09/05/23	27										
26		Vertical bend	120 days	Wed 12/10/22	Tue 28/03/23	27SS-60 days										
27		Capture technology	0 days	Tue 03/01/23	Tue 03/01/23	17										
28		Stage 2 R&D	1200 days	Wed 01/04/20	Tue 05/11/24											
29		FFA	1200 days	Wed 01/04/20	Tue 05/11/24											
30		Design and simulation	1200 days	Wed 01/04/20	Tue 05/11/24											
31		Detailed magnet design	960 days	Wed 03/03/21	Tue 05/11/24											
32		Magnet prototype	480 days	Wed 02/02/22	Tue 05/12/23											

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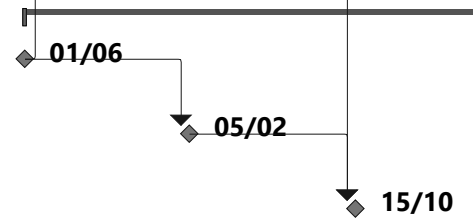
Task		Inactive Summary		External Tasks	
Split		Manual Task		External Milestone	
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Project Summary		Manual Summary		Manual Progress	
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ID	Task Mode	Task Name	Duration	Start	Finish	Predecessors	2020				2021				2022		
							Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1
33		RF cavity design and performance evaluation	720 days	Wed 03/03/21	Tue 05/12/23												
34		Injection and extraction design	280 days	Wed 09/11/22	Tue 05/12/23	32SS+200 days											
35		Stage 2 performance evaluation	240 days	Wed 06/12/23	Tue 05/11/24	34											
36		Longitudinal phase space manipulation design, simulation and prototyping	560 days	Wed 14/09/22	Tue 05/11/24	30FF											
37		Final beam preparation for in vivo end station	560 days	Wed 14/09/22	Tue 05/11/24	30FF											
38		End stations	1200 days	Wed 01/04/20	Tue 05/11/24												
39		Automation, sample handling, imaging	1200 days	Wed 01/04/20	Tue 05/11/24												
40		Instrumentation	1200 days	Wed 01/04/20	Tue 05/11/24												
41		Online dosimetry and dose profile	400.8 days	Wed 01/04/20	Wed 13/10/21												
42		Absolute dosimetry at ultra-high dose rates	400 days	Wed 01/04/20	Tue 12/10/21												
43		Low-energy beam diagnostics	300.8 days	Wed 13/10/21	Thu 08/12/22	41											
44		Fast feedback and control	400.8 days	Thu 08/12/22	Fri 21/06/24	43											

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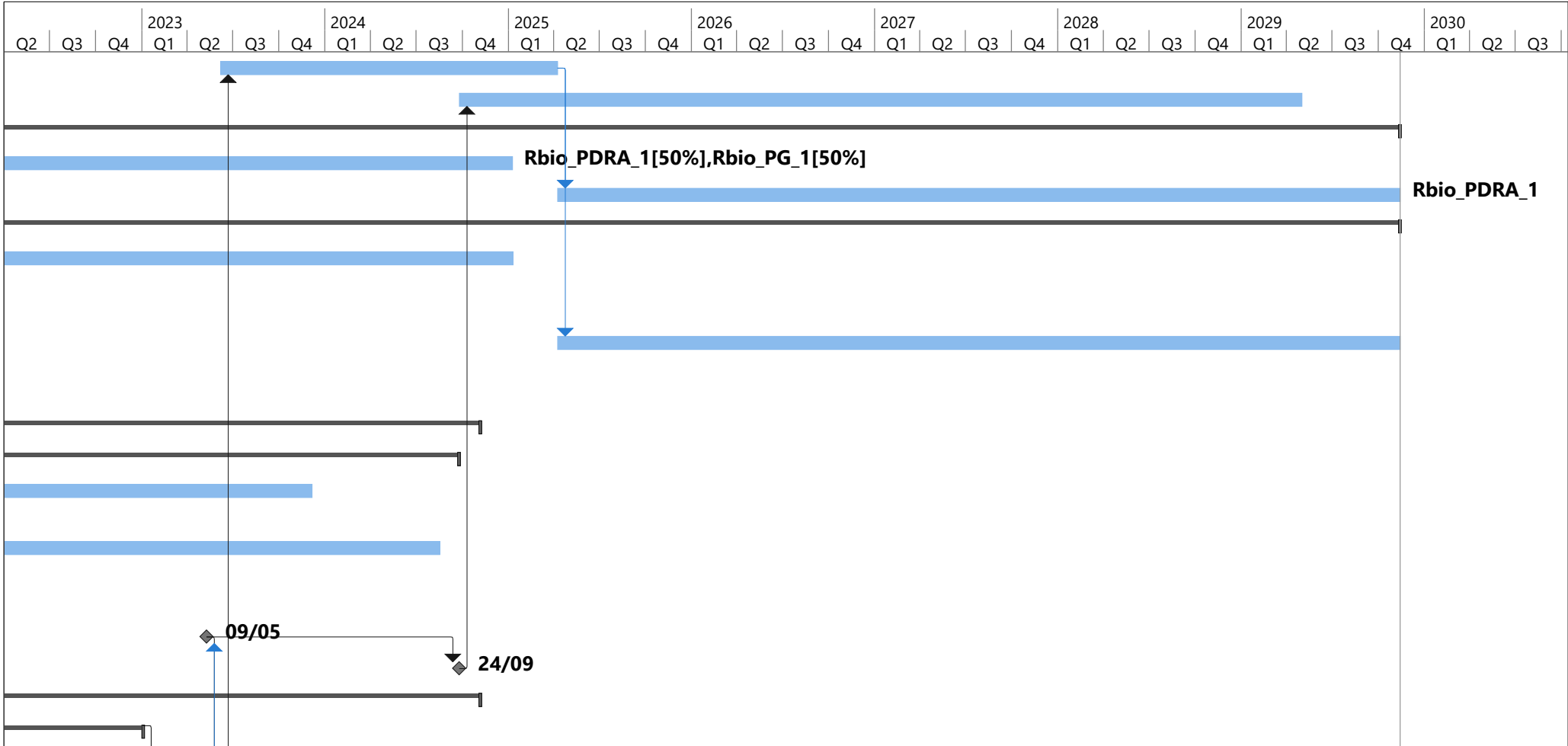
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ID	Task Mode	Task Name	Duration	Start	Finish	Predecessors	2020				2021				2022	
							Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
45		High-energy beam diagnc	360 days	Wed 21/06/23	Tue 05/11/24	28FF										
46		Software and Computing	720 days	Wed 02/02/22	Tue 05/11/24											
47		Development of online data processing farm	720 days	Wed 02/02/22	Tue 05/11/24	28FF										
48		Development of the controls and monitoring computing platform	720 days	Wed 02/02/22	Tue 05/11/24	28FF										
49		Gateway process	787 days	Mon 01/06/20	Tue 06/06/23											
50		GW0 -- Strategic assessment	0 days	Mon 01/06/20	Mon 01/06/20											
51		GW1 -- Business justification	0 days	Fri 05/02/21	Fri 05/02/21	50FS+9 mons										
52		GW2 -- Delivery strategy	0 days	Fri 15/10/21	Fri 15/10/21	51FS+9 mons,13										
53		GW3 -- Investment decision	0 days	Tue 06/06/23	Tue 06/06/23	14FS+1 mon										

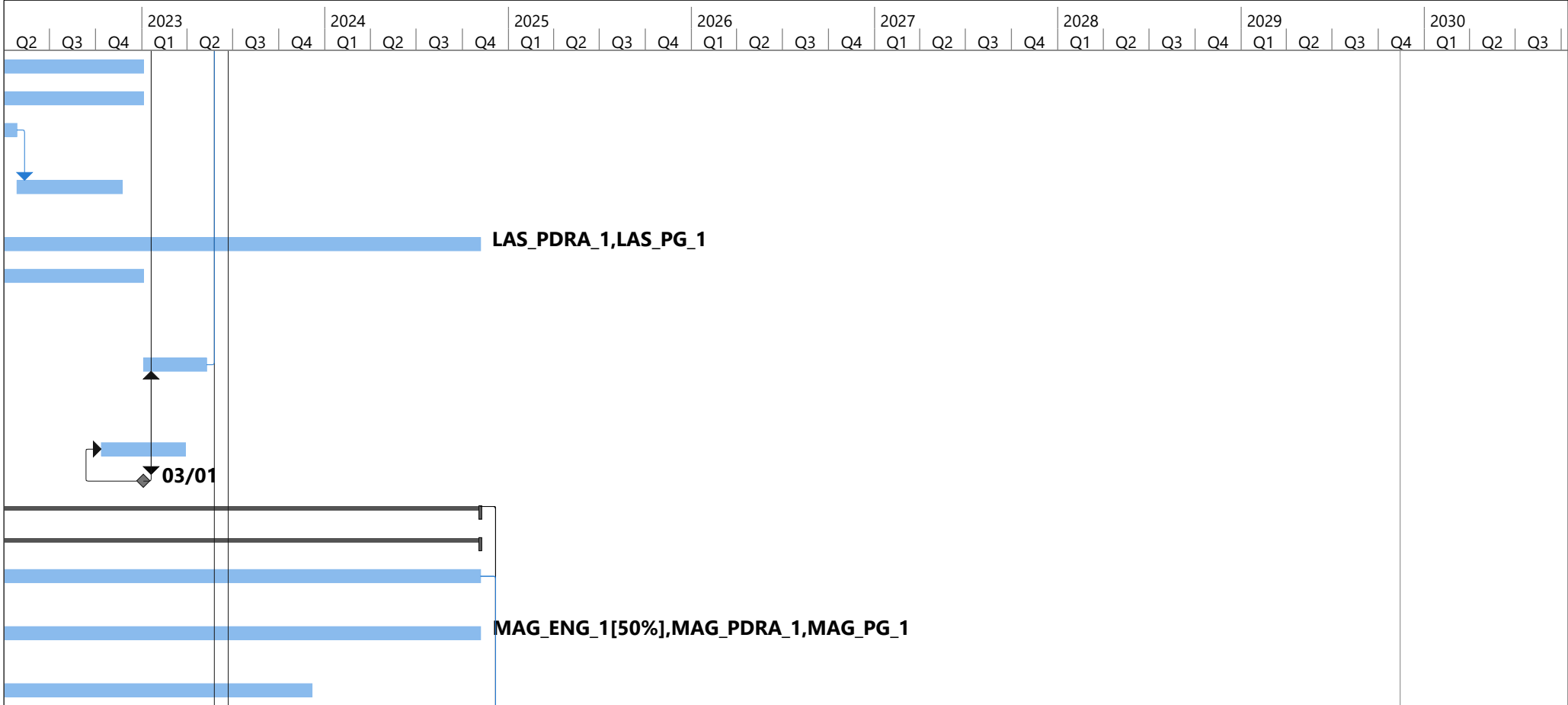


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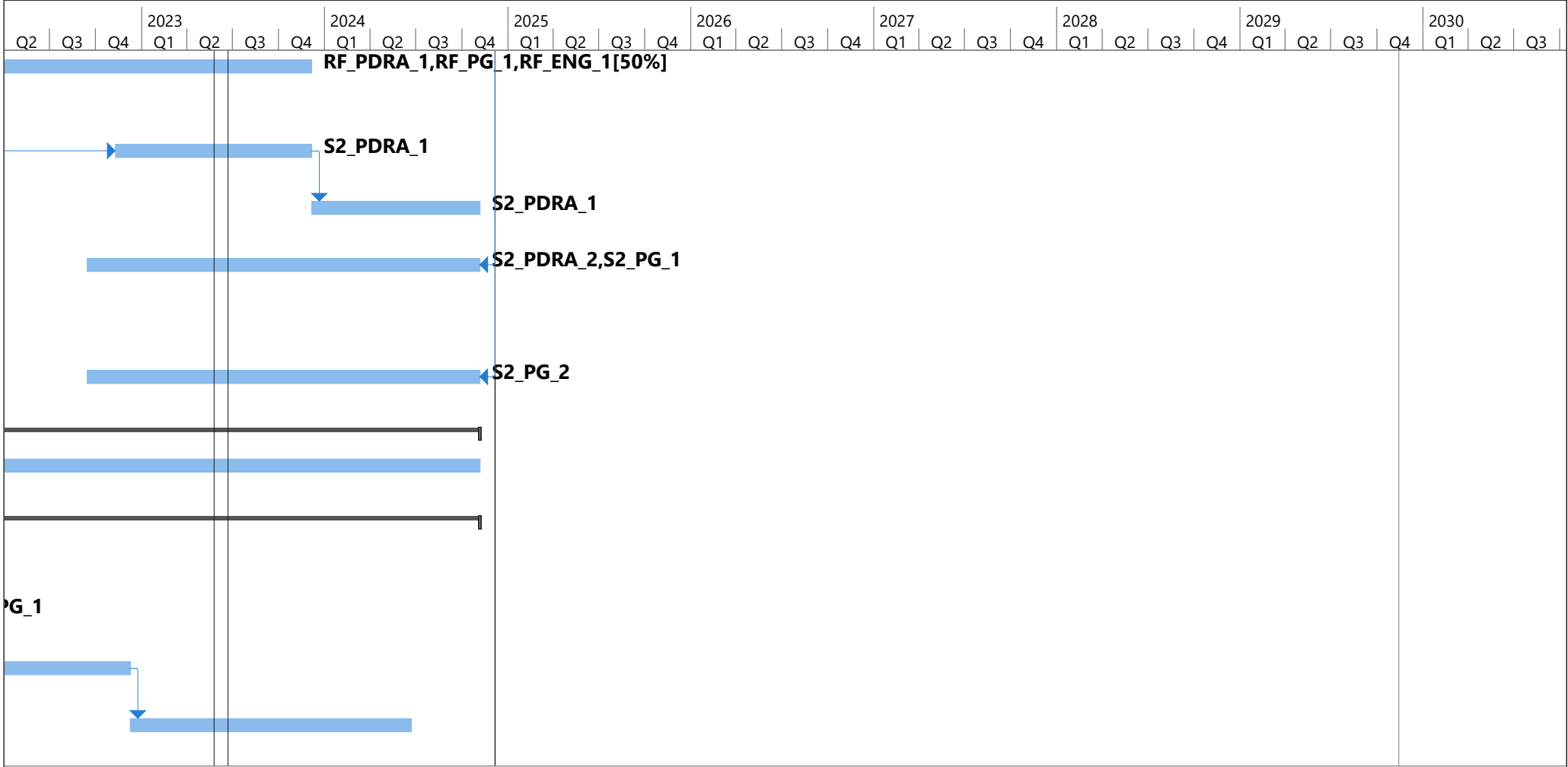


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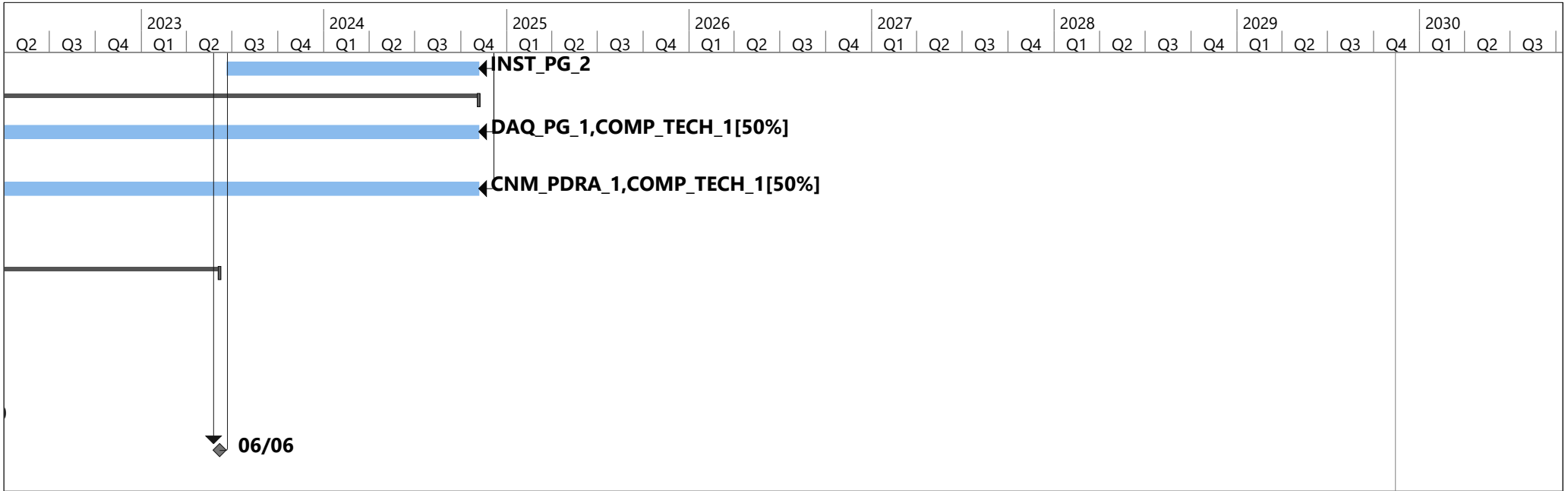


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