

NFR-10

NUCLEAR FUSION PLASMA
CONFINEMENT's PERFORMANCE
(Part I)

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- *Inertial Confinement Fusion (LLNL / NIF, Focused Energy)*
- *Field-Reversed Configurations (FRC – Helion, TAE)*
- *Stellarators (Proxima, Type One Energy)*
- *Pulsed Magneto-Inertial Fusion (Helion, Pacific Fusion)*

2.4 What Metrics Are Used Instead

- *Inertial Confinement (LLNL, Focused Energy)*
- *FRC / Beam-Driven Fusion (Helion, TAE)*
- *Stellarators*
- *Tokamaks (for comparison)*
- *Universal Reactor-Relevant Metrics*

3. WHY FUSION COMPANIES AVOID PUBLISHING TRIPLE PRODUCT

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1. PREFACE

It is possible that each fusion company will disclose each milestone achieved so that commentators and journalists can separate marketing hype from true innovation.

For this purpose, the **Milestones Program** used by **ARPA-E** (*) for verifying compliance with the Research and Development objectives for the production of commercial fusion energy is applicable.

Fusion Societies must achieve the conformation of a serious, confined plasma dense enough to allow the collisions necessary for the initiation of fusion reactions to occur. This configuration is regularly measured with a parameter called **Fusion Triple Product**:

However — not all companies publish actual triple-product numbers, especially privately-held fusion startups, as many are still in early R&D or use confinement concepts where this metric isn't the primary performance indicator (e.g., pulsed approaches like Field-Reversed Configurations). Where available, we have given values (or best estimates).