

From: Steven Krivit
Sent: 30 November 2014 22:27
To: xxxx@ukaea.org.uk
Subject: net fusion power

Hi Nick,

For JET's peak power production, which as I understand, generated 16MW fusion power for 24MW applied heating power input, can you tell me about how much total input electrical power was required to make the heating power of 24MW?

Thank you,

Steve
Steven B. Krivit
Publisher and Senior Editor, New Energy Times

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From: "Holloway, Nick J" <@ccfe.ac.uk>
To: <xxx@newenergytimes.com>
Subject: FW: net fusion power
Originating-IP: [194.128.56.121]

Hi Steven,

We don't have the electrical power input figure for this pulse to hand unfortunately. Below is some information from my colleague Chris on JET's typical electrical power levels, so it will be of this order. But if you do need the exact input figure we can find out.

Best wishes,

Nick

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From: Warrick, Chris D
Sent: 01 December 2014 16:28
To: Holloway, Nick J
Subject: FW: net fusion power

The general answer is that a JET pulse typically requires ~700 MW of electrical power to run. The vast majority of this goes into feeding the copper magnetic coils and the rest into subsystems and energising the heating systems. In future machines, the copper coils will be replaced with superconducting coils – which will ensure the total input power is dramatically reduced.

I don't have to hand specific numbers for this particular pulse – these can be obtained if necessary ...

Chris

Bringing Fusion Down to Earth!

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