The articles "*New Energy Times* Uncovers Serious Discrepancies in ITER Fusion Facts" and "The $21 Billion ITER Lie" have been withdrawn. Archival copies of those articles are here and here.

After extensive e-mail conversations between Steven B. Krivit, publisher and senior editor of *New Energy Times*, and Laban Coblentz, communication head of ITER, Coblentz failed to identify any error in either of the articles. Coblentz did, however, disagree with the goal of ITER as we presented it in our articles. However, the main goal of ITER, as we said in our articles, is identical to the main goal reported on the ITER Web site. Our new article offers readers Coblentz's perspective on this matter. Coblentz also said that the word "lie" was unwarranted.

The two articles have been replaced by a new, more extensive article, "The Selling of ITER," along with a supplementary document that provides excerpts from congressional testimony discussing ITER.

The $21 Billion ITER Lie

news.newenergytimes.net/

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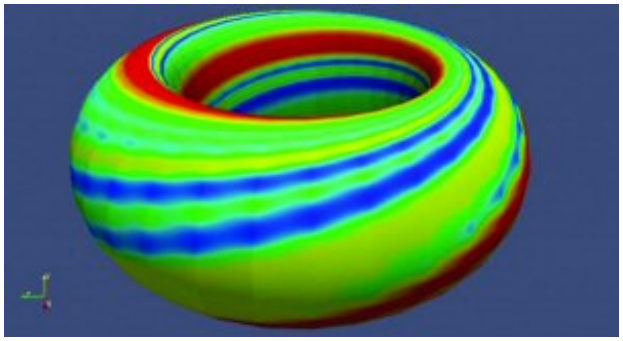


Dec. 15, 2016 – By Steven B. Krivit –

People representing the International Thermonuclear Experimental Reactor (ITER) have told journalists and the public that, when complete, the world's largest fusion reactor will produce 500 megawatts of thermal power from 50 MW of electrical input. This is incorrect.

ITER personnel have told journalists that ITER will produce 10 times more power during its fusion pulses than it consumes. This is also incorrect.

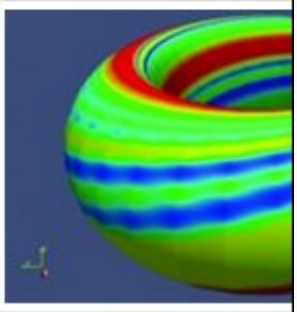
The screen shots below from the ITER Web site illustrate how the facts, while publicly available, easily lead to misinterpretation. Using the maximum values shown, for a 500 MW thermal output, the actual amount of input power that ITER might require could be as high as 620 MW and more likely 440 MW.

Based on 440 MW of input power, ITER will not produce a thermal power-output surplus of 450 MW, as implied on the ITER Web site. Instead, it would result in 60 MW net power gain.

Misleading public descriptions of ITER's energy balances have made it difficult for journalists to understand clearly the electrical requirements for producing a 500 MW fusion pulse. The ITER Web site says that the "electricity requirements for the ITER [reactor] and its facilities will range from 110 MW up to 620 MW for peak periods of 30 seconds during plasma operation." ITER has thus commingled the power requirements for the reactor itself with the power requirements for the entire facility.

ITER has not clarified whether those hundreds of megawatts are required for additional street lights and facility offices during those 30-second pulses or whether most of the 440 MW is required for the reactor to get 500 MW of thermal output. Based on the imprecise stated input power range of 110-620 MW, a 500 MW thermal output could result in either a power output that is 450% of the system input, which is above system break-even (but half as much as the stated 10 times gain) or a power output that is 95% of the system input, which is below break-even.

WHAT WILL ITER DO ?



The amount of fusion energy a tokamak is capable of producing correlates directly to the number of fusion reactions taking place in its core. Scientists know that the larger the vessel, the larger the volume of the plasma ... and therefore the greater the potential for fusion energy.

With ten times the plasma volume of the largest machine operating today, the ITER Tokamak will be a unique experimental tool, capable of longer plasmas and better confinement. The machine has been designed specifically to:

1) Produce 500 MW of fusion power for pulses of 400 s

The world record for fusion power is held by the European tokamak JET. In 1997, JET produced 16 MW of fusion power from a total input power of 24 MW (Q=0.67). ITER is designed to produce a ten-fold return on energy (**Q=10**), or 500 MW of fusion power from 50 MW of input power, for long pulses (400-600 s). ITER will not capture the energy it produces as electricity, but as the first of all fusion experiments in history to produce net energy ... it will prepare the way for the machine that can.

www.iter.org “What Will ITER Do?” (Retrieved Dec. 15, 2016)

Electricity requirements for the ITER plant and facilities will range from 110 MW to up to 620 MW for peak periods of 30 seconds during plasma operation. Power will be provided through the 400 kV circuit that already supplies the nearby CEA Cadarache site—a one-kilometre extension now links the ITER plant into the network.

ITER will have a steady state distribution system to supply the electricity needed to operate the entire plant, as well as offices and the operational facilities. Together, the **cooling water** and **cryogenic** systems will absorb about 80% of this supply.

A second pulsed power system will be used during plasma operation to provide the superconducting **magnet** coils and the **heating** and current drive systems with the large amount of power that they need. Electricity from the 400 kV circuit will be transformed to an intermediate level (69 kV) via 3 step-down transformers.

www.iter.org “Power Supply” (Retrieved Dec. 15, 2016)

Short link to this story: http://tinyurl.com/zgsemod

Questions? Comments? Submit a Letter to the Editor.