

AGAINST MURRAY

(1)

- ① pag 1: PEROW HAS BASED HIS REPORT UPON HIS MEASURES, MADE BY HIS INSTRUMENTATION. HE NEVER SAW FPL WATT METERS, NOR HE WAS REQUESTED TO DO SO. HE NEVER MADE ANY COMPLAINT ON THIS ISSUE AND PEROW DID NOT EVEN KNOW WHO IS FPL. BY THE WAY: THE INSTRUMENTATION OF PEROW WAS JUST CERTIFIED AND SURELY WAS MORE SOPHISTICATED THAN THE FPL STANDARD WATT METERS. THIS HAVING BEEN SAID, THE MEASUREMENTS OF PEROW, AS AN AVERAGE, ARE FAIRLY CONCILIABLE WITH THE ONES OF FPL.

- ② - pag 2: THE FACT THE COP INCREASES WHEN THE ENERGY INPUT DECREASES IS OBVIOUS: IN THE EQUATION

$$COP = \frac{\text{ENERGY OUTPUT}}{\text{ENERGY INPUT}}$$

BEING THE ENERGY INPUT AT THE DENOMINATOR, IT IS OBVIOUS THAT THE ~~LESS~~ ^{LOWER} IS THE VALUE OF THE DENOMINATOR, THE HIGHER IS THE VALUE OF THE COP. THIS IS MIDDLE SCHOOL MATH.

- ③ pag 2: 1 MWH/H IS THE THERMAL ENERGY REQUIRED BY A SMALL CONDOMINIUM ^(~ 100 KW/FAMILY IN WINTER). THE ENERGY OF 1 MWH/H IS EQUAL TO THE THERMAL ENERGY THAT THE SUN NORMALLY DELIVERS ON A SURFACE OF 1000 M²: IN FACT, THE SUN RADIATES 1000 Wh/h UPON 1 M² (CFR RICHARD WOLFSON, PROF. OF PHYSICS MIDDLEBURY COLLEGE, VOL. II LECTURE 40, PAGE 395 AND ATTACHED CD). THE ROOF OF THE DDM'S FACTORY IS ABOUT 1000 M² AND NOBODY EVER HAD PROBLEMS, WITH OR WITHOUT E-CAT. -- ANYWAY, THE HEAT PRODUCED BY

THE ECAT WAS COOLLED BY THE ENDOTHERMIC REACTION INSIDE THE PLANT OF JM AND THE EXCESS HEAT WAS DUMPED (= DISSIPATED) BY THE HEAT EXCHANGER.

④ pag. 3 WATER FLOW

FOR HURRAY NEVER MADE ANY TEST WITH THE FLOWMETER OF PENON AND WITH THE ECAT.

THE TEST HE TALKS ABOUT IS A TOTALLY "PERSONAL" TEST HE MADE BY HIMSELF WITHOUT ANY CONTROL.

HIS ASSUMPTION THAT THE FLOWMETER CAN

~~BE~~ MEASURE MULTIPLE OF THE REAL FLOW IS AN INVENTION, TOTALLY GROUNDFLESS, MADE BY

~~THE~~ THE CONSULTANT PAID BY IH TO SUSTAIN A CASE.

PENON HAS CERTIFIED THE FLOWMETER

TWICE, DOUBLE-CHECKING THE RESULTS WITH

INDEPENDENT LABORATORIES, AND HAS

CERTIFIED THAT HIS FLOWMETER HAD

A MARGIN OF ERROR $\pm 5\%$ USING

EXACTLY

THE SAME FLOW AND TEMPERATURE THAT WE HAD DURING THE TEST.

pipng, electrical equipment, utilities, etc. to support the two ventures. The author believes that the purpose of the E-Cat was to sell steam, via Mr. Rossi's company Leonardo Corp., to JM.

Background, Observations, and Narrative

One claim, perhaps the primary claim, of Mr. Rossi's invention, the E-Cat, is that it will produce many times more energy than it consumes. The author's understanding is that defendants Industrial Heat and IPH International, B.V. entered into a contractual arrangement with Mr. Rossi, based upon a hope that the E-Cat might, in fact, produce more energy than it consumed.

The author's understanding is that the plaintiffs contend that the Report dated 03/28/2016 by Dr. Ing. Fabio Penon is validation of the E-Cat's performance. The purpose of the author's investigation is to determine if the E-Cat did, in fact, produce more energy than it consumed, as Mr. Penon reported. The author has not been asked to form an opinion, nor has he formed an opinion on the physics of the reaction claimed by Dr. Rossi.

Basic Thermodynamics

The author will discuss the basics of thermodynamics before he analyzes the claimed performance of the E-Cat.

There are two foundational laws of thermodynamics, the First, and the Second.

The engineering definition of the first law of thermodynamics, in Thermodynamics, by Kenneth Wark, states: "When a closed system is altered adiabatically [i.e. without heat transfer], the work is the same for all possible paths which connect the two given equilibrium states." To put this into normal English, the first law of thermodynamics states that neither matter, nor energy, can be created or destroyed, they can only change form.

There are many forms of energy. A few of them are chemical, electrical, mechanical, nuclear, thermal, electromagnetic, and so on. Please see the picture below.

↳ Einstein's $E=mc^2$

IN LENR THE 1ST AND 2ND
P.T. ARE RESPECTED, BECAUSE
TRANSFORMING MASS INTO ENERGY
IT IS POSSIBLE TO PRODUCE MORE
ENERGY THAN THE CHEMICAL ENERGY
USED TO ACTIVATE THE LENR.

THE P.T. ARE CONTINGENT TO THE
SYSTEM!