Evidence-Based Public Policy for Support of Cold Fusion (LENR) Development

Six Questions to Guide Rational Policy Decisions

1. **What is the potential public welfare benefit of CF/LENR?**
   - Cheap, unlimited energy
   - Elemental transmutation
   - Other direct benefits (e.g. dispersed units, low O&M)
   - Many indirect benefits (e.g. reduced energy related environmental impacts)

2. **What is Evidence-Based Policymaking?**
   - Public decisions based on **facts**
   - Underpinnings in realism and pragmatism
   - Less emphasis on ideology
   - Rational policy for the public welfare benefit

3. **What are the Levels of Evidence to guide rational policymaking?**

Level of Evidence (LOE)		Probability
Insufficient Evidence	ISE	<50%
Preponderance of Evidence	POE	50-70%
Clear & Convincing Evidence	CCE	70-90%
Beyond a Reasonable Doubt	BRD	>90%

Borrowing from the legal field…

4. **What are the policy responses for emerging technologies?**

Level of Evidence	Response
ISE	Questionable support
POE	Normal support
CCE	Accelerated support
BRD	Crash program

Assuring rational policy for new sources of energy…

5. **What is the Level of Evidence for CR/LENR reality?**

CF/LENR Reality	LOE
Beaudette, 2002: 7 early replications	POE
Storms, 2007: over 300 verifications	CCE
Rossi, 2011: multiple demonstrations, 10/28 success?	BRD

Demonstrating an increasingly stronger case…

6. **What should be the Evidence-Based policy for CF/LENR support?**

LOE	Support
ISE	No change in negative policy
POE	Reinstate support with peers
CCE	Hot fusion level of support
BRD	Crash program

Basing level of support on increasing evidence…

Policy Conclusions

- *CF/LENR should not have been rejected in the first place*
- *Reinstatement is minimum rational response*
- *Support with hot fusion levels is warranted*
- *Crash program may now be well justified for the public welfare benefit*

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