

# Potential +/- Difference Inc.

March 8, 2013

## **NRC Conflict of Interest Office**

Secretary General's Office (SGO)

1200 Montreal Rd

Building M-58

Ottawa, Ontario K1A 0R6

[conflict.of.interest@nrc-cnrc.gc.ca](mailto:conflict.of.interest@nrc-cnrc.gc.ca)

Dear Secretary General,

I would like to report on behalf of several NRC employees;

- **a conflict of interest,**
- **failure of research ethics and integrity**
- **research misconduct.**

These allegations pertain to David Lisk, Ian Potter, and Yoga Yogendran.

Below is an explanation of the conflict of interest allegations with their direct reference to the NRC's policies.

As a brief supporting background, our company has developed an innovative new technology which allows electric vehicles to recharge themselves as they drive. This innovation is an electric generator which accelerates when a load is applied. Conventional scientific wisdom dictates that all generators must decelerate when delivering power to a load. The innovation was developed in the Power Lab at the University of Ottawa under direct supervision of Dr. R. Habash. Prior to being invited to establish a satellite lab at Ottawa U in 2008 by Dr. Habash we had the innovation validated at MIT by Dr. M. Zahn. A research collaboration between MIT and Ottawa U was intended to be established.

In order to perform in the manner described above the generator must violate a known law of physics called Lenz's Law. Lenz's Law is Newton's Third Law as it applies to electric generators which simply states that; "*for every action there is an equal and opposite reaction.*" This means that when an electric generator delivers power to a load the generator must decelerate the system. The generator must convert the mechanical energy input in the generator driveshaft to electrical power and the conversion must be less than 100% efficient to conform to the Law of Conservation of Energy.

Our generator does NOT decelerate the system when delivering power to a load and it actually accelerates the system instead, violating Lenz's Law, Newton's Third Law and the Law of Conservation of energy simultaneously in the process.

The energy conversion in our generator is over 100% simply because the on-load drive shaft mechanical power is greater than on no-load plus the generator's electrical output.

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This fact is easily to demonstrate and was done so at MIT and at Ottawa University for Dr. Habash, the Director of Engineering and the Dean of Engineering which was the basis for their invitation for us to relocate our research to Ottawa U to establish the backing theory as to what was going on in our generator and why.

My first encounter with NRC ITA David Lisk was at a Lead to Win seminar where David responded to a question I posed in a group discussion with an unrelated response, "*the NRC doesn't fund Perpetual Motion Projects.*"

This statement was a publicly humiliating statement directed at me personally and made at my personal and professional expense since the room was full of engineers and technicians and unbeknownst to me at the time it was a prelude to David Lisk's personal prejudices and bias' that would later form the foundation for David conflict of interest between his private interests and his public duties to the NRC and Canada. These bias' would later be transferred unchecked and unchallenged to Ian Potter and Yoga Yogendran with equal vigor and I suspect that they would be shared by almost everyone at the NRC.

When one of our colleagues suggested David Lisk as a possible avenue to IRAP funding and technology validation, I was very apprehensive for several reasons. Not only did David Lisk have a mental scientific blind spot which I suspected would prohibit his unbiased fulfillment of his NRC duties but he was also willing to share my private emails to him (requesting his assistance) with my colleague in an attempt to justify his bias, slander my reputation with a new colleague and maintain his avoidance of his duties to the NRC and scientific advancement in Canada.

Below is our companies experience with the NRC to date outlined in **blue**. It should be self explanatory.

## **About NRC**

The National Research Council (NRC) is the Government of Canada's premier organization for research and development.

## **This is what I hoped and was led to believe but it is not true in our experience.**

NRC partners with Canadian industry to take research impacts from the lab to the marketplace, where people can experience the benefits.

## **I had hoped this would be the case as well but this is also not true for us.**

This market-driven focus delivers innovation faster, enhances people's lives and addresses some of the world`s most pressing problems.

**By the time David Lisk and the NRC IRAP program finally arrived for a live technology demonstration our company was already introducing the technology to;**

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- **HERO Electric of India**
- **Liberty Electric Cars of the UK**
- **Jaguar Land Rover of the UK**
- **BMW of Germany**
- **and several other smaller companies on a worldwide scale as included in this letter in the appendix A.**

**Our company was working on a deal with HERO Electric of India to integrate our Regenerative Acceleration Generator (ReGenX) innovation into HERO's scooter line via Liberty Electric Cars of the UK. We were also working on a request from BMW to travel to Germany and provide a live demonstration to their engineers.**

**Our primary concern regarding the NRC was performance validation of the innovation to ensure our developmental partners that the innovation was legitimate and had valid market potential. We were not interested in funding.**

**Mostly dealing with the NRC and our partners was simply embarrassing as no one could understand why the NRC was so obtuse.**

**Our innovation's primary focus is in enhancing people's lives and addresses some of the world's most pressing problems by providing an alternative energy solution to fossil fuels. To reduce the global effects of greenhouse gas emissions and oil wars and the geopolitical issues regarding fossil fuel dependence.**

**We are responsive, creative and uniquely placed to partner with Canadian industry, to invest in strategic R&D programming that will address critical issues for our future.**

**In our case with regards to David Lisk and the NRC it is not responsive, not creative and refused to partner with this Canadian company and help propel our innovation and virtually all the time sensitive business development potentials regarding HERO Electric, Jaguar Land-Rover, BMW and all the companies listed who submitted LOI's at David Lisk's request fell by the way side and none of the potential was realized.**

**Each year our scientists, engineers and business experts work closely with thousands of Canadian firms, helping them bring new technologies to market. We have the people, expertise, services, licensing opportunities, national facilities and global networks to support Canadian businesses.**

**Our company had the innovation developed, demand from clients and mounting global support – what it didn't have was help from the NRC to bring this new technology to market. Each time we fulfilled one NRC requirement another was placed in our path to keep the goal continually out of reach.**

**Finally in desperation I reached out to Ian Potter who instructed me that the NRC has no facilities in Canada to test a new generator innovation. Obviously this statement is completely false.**

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## **Our vision**

To be the most effective research and development organization in the world, stimulating sustainable domestic prosperity.

**Potential Difference Inc's Regenerative Acceleration Generator Technology Innovation will ultimately be integrated into every vehicle in the world.**

**It will be incorporated into every generator and motor in the world.**

**The domestic prosperity benefits derived from this innovation for Canadians, the NRC and science will be unparalleled. If the NRC had its way it would never happen.**

## **Our mission**

Working with clients and partners, we provide innovation support, strategic research, scientific and technical services to develop and deploy solutions to meet Canada's current and future industrial and societal needs.

**Not true in our case. Our experience has been one of ignorance, fear, and avoidance.**

## **Our values**

- *Impact:* We make a positive difference for our stakeholders.

**If the stakeholders are Canadians then this isn't true at all – since scientific advancement in energy research isn't being impacted in a positive way at all only retarded.**

- *Accountability:* We are responsible for our work and our workplace.

**Not accountable to science, the NRC or Canadians.**

- *Leadership:* We value leadership, initiative and the application of best practices in our work.

**Right now it is only the blind leading the blind.**

- *Integrity:* We engage fairly and openly to earn credibility and trust.

**By sending Cease and Desist letters to Canadian companies leading innovation just because of personal irrational scientifically invalid and unsustainable beliefs?**

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- *Collaboration:* We actively collaborate to generate better solutions.

**If only this were true – our requests for collaboration and innovation validation or invalidation have gone unresolved for over 5 years now.**

NRC is committed to making a positive difference for its stakeholders and serving Canada with integrity, accountability, and openness. NRC supports its managers and employees to this end by helping them manage conflicts between their personal interests and their official duties.

**Any personal prejudice or superstition that cannot be scientifically supported must be examined if the NRC is going to make a positive difference and serve the interests of Canada, and the worldwide scientific community.**

**Clearly there is a gaping disconnect between personal interests and official duties at the NRC when evaluating or in this case refusing to evaluate a new Canadian innovation and when the NRC employees are reminded of their duties they levy harassment charges in an attempt to perpetuate their avoidance.**

## **Ethics and integrity**

NRC and its employees are committed to serving Canada and pursuing excellence in research and innovation by meeting the highest standards for ethics and integrity. This commitment is founded upon the [NRC Vision and Values](#).

**This ought to include actually looking at an innovation free of prejudice and personal bias and superstition shouldn't it?**

## **NRC Conflict of Interest Policy**

### **1.0 Introduction**

**The purpose** of this Policy is to

- assist NRC employees in recognizing and managing any conflicts between their private interests and their public duties.

***If this policy includes employees' fears of getting fired in the performance of their public duties then it's not working because David Lisk asked me, "how he wasn't going to get fired regarding this innovation and his presentation of it."***

**NRC shall**

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- provide for the implementation of this Policy through transparent procedures that support employees in identifying, avoiding and resolving conflict of interest situations efficiently and effectively; and
- resolve issues in favour of the public interest, when a conflict arises between the private interests and the official duties of an employee, in a respectful manner based upon trust and understanding.
- **The best way, easiest and fastest way to implement this policy in this case is to simply look at the innovation and test it according to known scientific methods and to either prove that it works or doesn't work.**
- **This will resolve the issue in the least costly way possible in favour of the public interest while protecting the interests of the NRC employee doing the testing and evaluations – if the threat of employment termination is removed.**

## **NRC employees shall**

- perform their official duties in the public interest in a manner that is not biased or improperly impaired by private interests that would be affected particularly or significantly by government actions in which they participate;
- **Impaired performance is virtually guaranteed if an employee is biased, has preconceived ideas about what is and isn't possible regarding innovation and is fearful about losing their job in the performance of their duties in the public interest because EVERYONE else shares the same bias.**
- The President and Senior Executive will provide leadership with respect to this Policy by approving it and promoting it through actions that exemplify the values and the spirit, as well as the specific measures, of this Policy.
- **In this case I suspect the Senior Executive ALL share the same bias and are ALL equally impaired so personal and private interests (prejudices and preconceived ideas) will always overrule the NRC's performance of its duties to Canadians.**
- **NRC Employees**
- All NRC employees play an important role as representatives of the entire organization as their actions not only reflect upon their own integrity but also that of their colleagues, NRC as a whole, and all of the Government of Canada.

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**David Lisk, Ian Potter and Yoga Yogendran all compromised their personal integrity by allowing their fears and bias' to dictate the performance of their duties in this case.**

- In addition to a general duty to make decisions in the public interest, to resolve any conflicts between their private interests and their official duties

**It is in the public interest to resolve the conflict that currently exists between NRC employee private interests regarding maintaining their misconceptions in this case with an open evaluation of the innovation.**

- providing fair and unbiased service to all Canadians

**I am a Canadian, our company is a Canadian company, our innovation is Canadian – when can we expect fair and unbiased service?**

## **NRC's Research Integrity Policy**

Effective: 09/14/2009

Supersedes: 01/12/2005

### **11.8.1 PURPOSE**

#### **11.8.1.1 Trust**

A history of research excellence and scientific distinction has secured for NRC and its employees the respect and trust of the Canadian public, its clients, research organizations, and researchers around the world. As scientific advances are considered to be critical in areas such as economic competitiveness, health, national security, and environmental protection, public officials in all industrialized countries are obligated to ensure the highest levels of integrity in research. Research is an increasingly complex team endeavour involving a variety of participants and requiring a strong element of trust among all players.

**When an employee is fearful of losing their job in the performance of their duties to the NRC and Canada regarding the evaluation of a scientific advance then how can integrity in research exist and how can environmental protection be served?**

The main purpose of NRC's Research Integrity Policy is to help maintain this trust.

**Trust maintenance has failed.**

#### **11.8.1.2 Awareness**

This policy will help ensure that NRC's managers and employees adhere to the most rigorous standards required of scientific research. This policy also applies, to the extent that it is reasonable and feasible, to guest workers and other collaborators involved in NRC research activities

**Does sending someone who knows virtually nothing about electric generators or how they work to evaluate a new generator innovation qualify as adherence to the most rigorous standards?**

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**Does Ian Potter's review of some random internet material as the basis for NRC lab testing qualify as adherence to the most rigorous scientific standards required of scientific research when a client is requesting formal testing?**

## **11.8.1.3 Transparency**

A more specific goal of this policy is to clearly set out an open process that will be followed to address allegations of research misconduct.

## **11.8.2 PRINCIPLES**

To ensure the integrity of NRC research, everyone involved in research with or within NRC is thus required to observe these basic principles:

1. conduct research and experimental development in compliance with accepted standards;

**When evaluating a new electric generator innovation is it accepted research and experimental development standard to send an evaluator who knows little to nothing about electric generators?**

2. use scholarly and scientific rigor in obtaining, recording and analyzing data and in reporting results;

**Who obtains and records zero analyzing data and relies on anecdotal evidence only.**

3. maintain complete records of research and keep all relevant data;

**Who keeps no records or data of the technology demonstration?**

4. disclose to the appropriate body any conflict of interest that could be seen to influence one's judgment, not only in the conduct of research but also in related activities such as participation in a peer review process;

**Who provides nothing for peer review and who openly admits to having their judgment influenced and compromised and does little or no actual research or test data collection.**

5. respect all NRC obligations under research collaboration agreements;

**Like honesty, trust and transparency?**

## **6. 11.8.3.4 Accepted standards**

7. It is the responsibility of all who conduct research for NRC to ensure that the methodology and practices employed in their research conform to accepted standards for their field of research.

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**Accepted standards for the field of research regarding the evaluation of a new electric generator innovation would entail the comparison of performance between a conventional generator and the new one. While this was performed by a retired NRC scientist in 2009 at the University of Ottawa (attached) it was not performed by David Lisk. My request to go over the 2009 test data and reconstruct the tests were refused.**

8. Furthermore, NRC requires that research procedures be carefully designed so that fabrication or falsification of data will not likely go undetected. Researchers are thus expected to conduct proper experiments with appropriate protocols.

**Our first and primary request (which continued for months) was to have our generator innovation prototype(s) deployed in a NRC lab for proper inspection and performance validation to ensure proper experiments and appropriate protocols could be ensured to remove any doubt which may have existed at our facility.**

**These requests were denied at every turn until finally Ian Potter told us in an email that the NRC doesn't test generators which cannot be considered true by any stretch of the imagination.**

## **9. 11.8.3.5 Records retention**

10. Records of experiments (regardless of physical form or medium) should be properly secured and stored. They can be kept as bound laboratory notebooks with numbered and dated pages or as secure, dated computer files that cannot be altered. If the electronic files are alterable, a quality system that ensures that records are appropriately stored, tracked, maintained and archived must be established.

**No records of experiments were ever taken by David Lisk in any form or medium so we provided them independently and posted them on Slideshare for ease of sharing due to the size of the file.**

**<http://www.slideshare.net/ThaneCHeins/potential-difference-nrc-report-final>**

**This document is a true and detailed analysis of the demonstrations made to David Lisk of the NRC. It has been shared and viewed worldwide 746 times.**

## **11.11.8.4 DEFINITION OF RESEARCH MISCONDUCT**

### **12.11.8.4.1 General**

13. NRC deems any action that is inconsistent with the principles of research integrity stated in a previous section of this policy as "research misconduct". Research misconduct can, however, be of a minor or major nature.

**Minor research misconduct is evident in this case and the principles of research integrity have been subverted.**

Fabrication of data, falsification of data, and plagiarism are considered **major** misconduct by NRC and most other research organizations in Canada and abroad. Such research misconduct would include:

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- Selectively excluding data from analysis
- Misinterpreting data to obtain desired results (including inappropriate use of statistical methods)

**Selective data exclusion from analysis has definitely occurred in this case by both David Lisk and Ian Potter.**

The following may be considered either as major or as minor research misconduct, depending on the nature and extent of the behaviour involved. If misconduct is considered minor, it can be addressed by managers in accordance with other relevant processes, with reference to this policy, but independent of the investigation provisions within it.

Data related and physical research materials misconduct

- Not preserving primary data

**No primary data was ever recorded so preserving it can not apply. Our preservation has resulted in a letter from the Canadian Justice Department.**

- Bad data management, storage
- Withholding important data from the scientific community

**Withholding important data from the scientific community and refusal to verify data previously obtained by a former NRC employee certainly applies here.**

## **11.8.5 REPORTING SUSPECTED RESEARCH MISCONDUCT**

### **11.8.5.1 Non compliance**

NRC is committed to an open process that is readily accessible to any person who brings forward an allegation of non compliance with research integrity principles. Under this policy, any allegation of serious misconduct in NRC's research activities will be thoroughly reviewed and, if substantiated, will be addressed in a timely fashion. In this process, NRC will endeavour to protect the rights and needs of all persons involved.

**Great I look forward to it!**

**Kind regards  
Thane**

Thane C. Heins  
President & CEO

**Potential +/- Difference Inc. R & D**

*"Using our potential to make a difference"*

Email: [thaneh@potentialdifference.ca](mailto:thaneh@potentialdifference.ca)

Cell: 613.795.1602

**YOU** <http://www.youtube.com/user/pdicanada1>

**Linked** [http://www.linkedin.com/profile/view?id=107557432&trk=tab\\_pro](http://www.linkedin.com/profile/view?id=107557432&trk=tab_pro)

**slideshare** <http://www.slideshare.net/ThaneCHeins>

**Technology Endorsements & Industry Comments**

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*"As I'm concerned this is a work of GENIUS (and a rather major one at that)."*

**- Les Virany BSEE MIT Former USPTO examiner and Registered Patent Agent**

"As a mechanical engineer I'm here to explain how it works and why it works. And it does work; over a dozen of us were witness to that last Monday (as well as a film crew--filming in 3D no less!)." **-Mike Brace, Tech Editor EV World (2012)**

"This is the Holy grail for generators."

**-NRC Scientist Doug Hartwick at Ottawa University (2009)**

"This is a freakin' game changer!"

**-Mike Elwood, Chairman Electric Mobility Canada at Ottawa University (2009)**

"Of course it accelerates when a load is applied...! This represents several new chapters in physics, that is why we are consulting MIT."

**-Dr. Habash, University of Ottawa (2007)**

"It works and it is not something I would have expected, now I am just trying to figure it out?"

**-Dr. Marcus Zahn at MIT (2007)**

"A number of your experiments are not lying in the field of Maxwellian electrodynamics? That is fascinating! I will inform you on any progress that i'll make along with reports."

**-Dr. Evstigneev N.M., Leading Scientist, Department of Chaotic Dynamics, Institute for System Analysis, Russian Academy of Science (2009)**

"Your claims seem to violate the law of conservation of energy and Maxwell's equations of electro-magnetics." I will send you a short proposal, including my plan of work, estimate of cost, etc. Then we can sign a short agreement and proceed."

**-Mehrdad (Mark) Ehsani, Ph.D., P.E., F.IEEE, F.SAE, Robert M. Kennedy Professor & Director, Power Electronics and Motor Drives Laboratory & Advanced Vehicle Systems Research Program, Department of Electrical & Computer Engineering, Texas A&M University (2008)**

"This is absolutely fascinating stuff you are doing!"

**-Joseph Shin, Electricity and Magnetism Professor, Concordia University (2011)**

"If possible would like to meet with you to discuss your approach to the Association and of course to get a better feel about the physics behind your invention. I would still like to see what you are doing and perhaps we can include some of your material on our website newsletter?"

**-David Mann, Canadian Association for the Advancement of Science (2009)**

"Thane, Your Press Release was most interesting to me as a physicist and an engineer. The level of technical detail was adequate to tell me that you probably have made a very significant advance in applied physics and in safely and successfully handling a new source of electric power. Congratulations!"

**-Dr. Stanley Townsend, University of Toronto & Former Managing Editor of the Canadian Journal of Physics (2006)**

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"We are interested in using the ReGenX technology in our LinkVolt Project to reduce roadside refueling."

**-Neil Young, LincVolt Project** (2011)

"The magnetics lab here at Goddard expressed some interest in having you come down to do a colloquium."

**-NASA** (2008)

"We really are more interested in developing its use and application for military power requirements."

**-US Air Force** (2009)

"I have asked Mr. Gilles Brassard, A/Director, Spacecraft Payload here at the Canadian Space Agency to look at your technologies and to visit your laboratory."

**-Canadian Space Agency** (2009)

"I am writing to ask you to submit what you feel would be an appropriate document to describe your regenerative acceleration technology for circulation to our Committee members."

**-Al Cormier, Executive Director Electric Mobility Canada** (2009)

"You seem to have made an interesting discovery. Our internal physics experts review this information and have determined that it is very interesting work."

**-Mike Simpson, Transportation Analyst Rocky Mountain Institute** (2009)

"Would you be willing to contribute an article on this technology to the Journal for Engineering and Public Policy?"

**-Donald Wallace, Executive Director Ontario Centre for Engineering and Public Policy** (2009)

"Thanks for providing technical information. If the effect of your invention is really true, I am sure there will be strong needs in the market."

**-Nissan Japan** (2012)

"I would like to know why you are not the toast of the town... this technology can be offered as a range extension option to our clients."

**-Thomas Fritz, Vice President Electric Vehicle Operations, CODA Automotive** (2012)

"The technology looks really interesting and is revolutionary. I would like to learn more about the technology. Is it possible to organize a demo or a lecture in the USA?"

**-Chrysler Electrified Powertrains** (2012)

"This sounds interesting. I'd like you to connect with our Fuel Economy Learning Program manager, to schedule a time for you to come in and share the technology with us. We need to know more about the Physics behind it."

**-General Motors** (2012)

"It would be fitting for the inventor of the automobile to be first with your revolutionary technology and for me to play a role in that would be awesome!"

**-Mercedes-Benz** (2012)

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"When we finally understand what Thane Heins has discovered, we likely will have to rewrite the laws of electromagnetism."

**-Mike Brace EV World Tech Editor (2010)**