## 1nc

## off

#### Nuclear PRODUCTION must be for the PURPOSE of energy generation

International Atomic Energy Agency 7

<http://www-pub.iaea.org/MTCD/publications/PDF/Pub1290_web.pdf>

 Under the terms of Article III of its Statute, the IAEA is authorized to establish or adopt standards of safety for protection of health and minimization of danger to life and property, and to provide for the application of these standards. The publications by means of which the IAEA establishes standards are issued in the IAEA Safety Standards Series. This series covers nuclear safety, radiation safety, transport safety and waste safety, and also general safety (i.e. all these areas of safety). The publication categories in the series are Safety Fundamentals, Safety Requirements and Safety Guides.

 The process of inducing radioactivity.􀁌 Most commonly used to refer to the induction of radioactivity in moderators, coolants, and structural and shielding materials, caused by irradiation with neutrons.􀁌 The BSS definition — “The production of radionuclides by irradiation.” [1] —is technically adequate; however, the term ‘production’ gives a connotation that this is being done intentionally rather than, as is normally the case,incidentally.

All demonstration gets class 104 licenses – that’s research, not production

Matuzan and Walker 85

 Controlling the Atom:

The Beginnings of Nuclear Regulation, 1946-1962

 George T. Mazuzan is Assistant Professor of History at State University of New York at Geneseo. University of Vermont awarded him his B.S. and M.A., and his Ph.D. was conferred by Kent State University. He has published several articles.

 Sections of the 1954 act reflected the state of the technology by establishing two classes of licenses for atomic facilities. One section authorized the AEC to issue commercial or "class 103" licenses (after the section number in the law) whenever it had determined that a facility had been "sufficiently developed to be of practical value for industrial or commercial purposes." Since the agency and the Joint Committee interpreted "practical value" to mean that atomic facilities had to be judged eco- nomically competitive with other energy sources, issuance of class-103 licenses was postponed until the industry had passed through its research and development phase.33 Instead, early power reactor facilities received "class-104" licenses un- der the terms of section 104. Reactors used in medical therapy, university research, and power demonstration came under this category. A key phrase authorized reactor licenses that would lead to the "demonstra- tion of the practical value . . . for industrial or commercial purposes." Class-104 licenses, then, covered all power reactors used during the developmental period until the industry could find a design that would eventually meet the "practical value" criterion of a class-103 commercial license. Furthermore, section 104 specifically instructed the AEC to im- pose the minimum amount of regulation on a licensee consistent with the public health and safety. In other words, a class-104 license indicated that the government wanted to encourage the new industry to undertake research and development under minimum regulation that would lead to major advances in power-reactor technology.34

Limits and precision – research reactors are both formally and technically distinct. There are HUNDREDS of types

World Nuclear Assocation 10

http://www.world-nuclear.org/info/inf61.html

 The World Nuclear Association (WNA), formerly the Uranium Institute, is an international organization that promotes nuclear power and supports the many companies that comprise the global nuclear industry. Its members come from all parts of the nuclear fuel cycle, including uranium mining, uranium conversion, uranium enrichment, nuclear fuel fabrication, plant manufacture, transport, and the disposition of used nuclear fuel as well as electricity generation itself [1]. Together, WNA members are responsible for 95% of the world's nuclear power outside of the U.S. [2] as well as the vast majority of world uranium, conversion and enrichment production.[3] The WNA says it aims to fulfill a dual role for its members: Facilitating their interaction on technical, commercial and policy matters and promoting wider public understanding of nuclear technology. [4] Accredited to the United Nations, the WNA is an independent, non-profit organization, funded primarily by membership subscriptions

Many of the world's nuclear reactors are used for research and training, materials testing, or the production of radioisotopes for medicine and industry. They are basically neutron factories.

These are much smaller than power reactors or those propelling ships, and many are on university campuses. There are about 240 such reactors operating, in 56 countries. Some operate with high-enriched uranium fuel, and international efforts are underway to substitute low-enriched fuel. Some radioisotope production also uses high-enriched uranium as target material for neutrons, and this is being phased out in favour of low-enriched uranium. Research reactors comprise a wide range of civil and commercial nuclear reactors which are generally not used for power generation. The term is used here to include test reactors, which are more powerful than most. The primary purpose of research reactors is to provide a neutron source for research and other purposes. Their output (neutron beams) can have different characteristics depending on use. They are small relative to power reactors whose primary function is to produce heat to make electricity. They are essentially net energy users. Their power is designated in megawatts (or kilowatts) thermal (MWth or MWt), but here we will use simply MW (or kW). Most range up to 100 MW, compared with 3000 MW (i.e. 1000 MWe) for a typical power reactor. In fact the total power of the world's 283 research reactors is little over 3000 MW.Research reactors are simpler than power reactors and operate at lower temperatures. They need far less fuel, and far less fission products build up as the fuel is used. On the other hand, their fuel requires more highly enriched uranium, typically up to 20% U-235, although some older ones use 93% U-235. They also have a very high power density in the core, which requires special design features. Like power reactors, the core needs cooling, though only the higher-powered test reactors need forced cooling. Usually a moderator is required to slow down the neutrons and enhance fission. As neutron production is their main function, most research reactors also need a reflector to reduce neutron loss from the core.As of October 2011 the IAEA database showed that there were 241 operational research reactors (92 of them in developing countries), 3 under construction, 202 shut down (plus 13 temporary) and 211 decommissioned.Types of research reactors There is a much wider array of designs in use for research reactors than for power reactors, where 80% of the world's plants are of just two similar types. They also have different operating modes, producing energy which may be steady or pulsed.A common design (67 units) is the pool type reactor, where the core is a cluster of fuel elements sitting in a large pool of water. Among the fuel elements are control rods and empty channels for experimental materials. Each element comprises several (e.g. 18) curved aluminium-clad fuel plates in a vertical box. The water both moderates and cools the reactor, and graphite or beryllium is generally used for the reflector, although other materials may also be used. Apertures to access the neutron beams are set in the wall of the pool. Tank type research reactors (32 units) are similar, except that cooling is more active.The TRIGA reactor is another common design (40 units). The core consists of 60-100 cylindrical fuel elements about 36 mm diameter with aluminium cladding enclosing a mixture of uranium fuel and zirconium hydride (as moderator). It sits in a pool of water and generally uses graphite or beryllium as a reflector. This kind of reactor can safely be pulsed to very high power levels (e.g. 25,000 MW) for fractions of a second. Its fuel gives the TRIGA a very strong negative temperature coefficient, and the rapid increase in power is quickly cut short by a negative reactivity effect of the hydride moderator.Other designs are moderated by heavy water (12 units) or graphite. A few are fast reactors, which require no moderator and can use a mixture of uranium and plutonium as fuel. Homogenous type reactors have a core comprising a solution of uranium salts as a liquid, contained in a tank about 300 mm diameter. The simple design made them popular early on, but only five are now operating.Research reactors have a wide range of uses, including analysis and testing of materials, and production of radioisotopes. Their capabilities are applied in many fields, within the nuclear industry as well as in fusion research, environmental science, advanced materials development, drug design and nuclear medicine.The IAEA lists several categories of broadly classified research reactors. They include 60 critical assemblies (usually zero power), 23 test reactors, 37 training facilities, two prototypes and even one producing electricity. But most (160) are largely for research, although some may also produce radioisotopes. As expensive scientific facilities, they tend to be multi-purpose, and many have been operating for more than 30 years.A total of over 670 research and test reactors has been built worldwide, 227 of these in the USA and 97 in the former Soviet Union. In the USA, 193 were commissioned in 1950s and 1960s.

## off

#### The aff’s invocation of death impacts is necrophilia, a blind obsession with body counts that ends in extinction. Vote neg to reject death impacts—this is a gateway issue—if they win death impacts are good, the rest of the 1NC applies—we won’t cross-apply to prove links

Erich **Fromm 64**, PhD in sociology from Heidelberg in 1922, psychology prof at MSU in the 60’s, “Creators and Destroyers”, The Saturday Review, New York (04. January 1964), pp. 22-25

People are aware of the possibility of nuclear war; they are aware of the destruction such a war could bring with it--and yet they seemingly make no effort to avoid it. Most of us are puzzled by this behavior because we start out from the premise that people love life and fear death. Perhaps we should be less puzzled if we questioned this premise. Maybe there are many people who are indifferent to life and many others who do not love life but who do love death. There is an orientation which we may call love of life (biophilia); it is the normal orientation among healthy persons. But there is also to be found in others a deep attraction to death which, following Unamuno's classic speech made at the University of Salamanca (1938), I call necrophilia. It is the attitude which a Franco general, Millán Astray, expressed in the slogan "Long live death, thus provoking Unamuno’s protest against this "necrophilous and senseless cry." Who is a necrophilous person? He is one who is attracted to and fascinated by all that is not alive, to all that is dead; to corpses, to decay, to feces, to dirt. Necrophiles are those people who love to talk about sickness, burials, death. They come to life precisely when they can talk about death. A clear example of the pure necrophilous type was Hitler. He was fascinated by destruction, and the smell of death was sweet to him. While in the years of success it may have appeared that he wanted only to destroy those whom he considered his enemies, the days of the Götterdämmerung at the end showed that his deepest satisfaction lay in witnessing total and absolute destruction: that of the German people, of those around him, and of himself. The necrophilous dwell in the past, never in the future. Their feelings are essentially sentimental; that is, they nurse the memory of feelings which they had yesterday--or believe that they had. They are cold, distant, devotees of "law and order." Their values are precisely the reverse of the values we connect with normal life; not life, but death excites and satisfies them. If one wants to understand the influence of men like Hitler and Stalin, it lies precisely in their unlimited capacity and willingness to kill. For this they' were loved by the necrophiles. Of the rest, many were afraid of them and so preferred to admire, rather than to be aware of, their fear. Many others did not sense the necrophilous quality of these leaders and saw in them the builders, saviors, good fathers. If the necrophilous leaders had not pretended that they were builders and protectors, the number of people attracted to them would hardly have been sufficient to help them seize power, and the number of those repelled by them would probably soon have led to their downfall. While life is characterized by growth in a structured, functional manner, the necrophilous principle is all that which does not grow, that which is mechanical. The necrophilous person is driven by the desire to transform the organic into the inorganic, to approach life mechanically, as if all living persons were things. All living processes, feelings, and thoughts are transformed into things. Memory, rather than experience--having, rather than being--are what counts. The necrophilous person can relate to an object--a flower or a person--only if he possesses it; hence, a threat to his possession is a threat to himself; if he loses possession he loses contact with the world. That is why we find the paradoxical reaction that he would rather lose life than possession, even though, by losing life, he who possesses has ceased to exist. He loves control, and in the act of controlling he kills life. He is deeply afraid of life, because it is disorderly and uncontrollable by its very nature. The woman who wrongly claims to be the mother of the child in the story of Solomon's judgment is typical of this tendency; she would rather have a properly divided dead child than lose a living one. To the necrophilous person justice means correct division, and they are willing to kill or die for the sake of what they call, justice. "Law and order" for them are idols, and everything that threatens law and order is felt as a satanic attack against their supreme values. The necrophilous person is attracted to darkness and night. In mythology and poetry (as well as in dreams) he is attracted to caves, or to the depth of the ocean, or depicted as being blind. (The trolls in Ibsen's Peer Gynt are a good example.) All that is away from or directed against life attracts him. He wants to return to the darkness {23} of the womb, to the past of inorganic or subhuman existence. He is essentially oriented to the past, not to the future, which he hates and fears. Related to this is his craving for certainty. But life is never certain, never predictable, never controllable; in order to make life controllable, it must be transformed into death; death, indeed, is the only thing about life that is certain to him. The necrophilous person can often be recognized by his looks and his gestures. He is cold, his skin looks dead, and often he has an expression on his face as though he were smelling a bad odor. (This expression could be clearly seen in Hitler's face.) He is orderly and obsessive. This aspect of the necrophilous person has been demonstrated to the world in the figure of Eichmann. Eichmann was fascinated by order and death. His supreme values were obedience and the proper functioning of the organization. He transported Jews as he would have transported coal. That they were human beings was hardly within the field of his vision; hence, even the problem of his having hated or not hated his victims is irrelevant. He was the perfect bureaucrat who had transformed all life into the administration of things. But examples of the necrophilous character are by no means to be found only among the inquisitors, the Hitlers and the Eichmanns. There are any number of individuals who do not have the opportunity and the power to kill, vet whose necrophilia expresses itself in other and (superficially seen) more harmless ways. An example is the mother who will always be interested in her child's sickness, in his failures, in dark prognoses for the future; at the same time she will not be impressed by a favorable change nor respond to her child's joy, nor will she notice anything new that is growing within him. We might find that her dreams deal with sickness, death, corpses, blood. She does not harm the child in any obvious way, yet she may slowly strangle the child's joy of life, his faith--in growth, and eventually infect him with her own necrophilous orientation. My description may have given the impression that all the features mentioned here are necessarily found in the necrophilous person. It is true that such divergent features as the wish to kill, the worship of force, the attraction to death and dirt, sadism, the wish to transform the organic into the inorganic through "order" are all part of the same basic orientation. Yet so far as individuals are concerned, there are considerable differences with respect to the strength of these respective trends. Any one of the features mentioned here may be more pronounced in one person than in another. Furthermore, the degree to which a person is necrophilous in comparison with his biophilous aspects and the degree to which a person is aware of necrophilous tendencies and rationalizes them vary considerably from person to person. Yet the concept of the necrophilous type is by no means an abstraction or summary of various disparate behavior trends. Necrophilia constitutes a fundamental orientation; it is the one answer to life that is in complete opposition to life; it is the most morbid and the most dangerous among the orientations to life of which man is capable. It is true perversion; while living, not life but death is loved--not growth, but destruction. The necrophilous person, if he dares to be aware of what he feels, expresses the motto of his life when he says: "Long live death!" The opposite of the necrophilous orientation is the biophilous one; its essence is love of life in contrast to love of death. Like necrophilia, biophilia is not constituted by a single trait but represents a total orientation, an entire way of being. It is manifested in a person's bodily processes, in his emotions, in his thoughts, in his gestures; the biophilous orientation expresses itself in the whole man. The person who fully loves life is attracted by the process of life in all spheres. He prefers to construct, rather than to retain. He is capable of wondering, and he prefers to see something new to the security of finding the old confirmed. He loves the adventure of living more than he does certainty. His approach to life is functional rather than mechanical. He sees the whole rather than only the parts, structures rather than summations. He wants to mold and to influence by love, by reason, by his example--not by force, by cutting things apart, by the bureaucratic manner of administering people as if they were things. He enjoys life and all its manifestations, rather than mere excitement. Biophilic ethics has its own principle of good and evil. Good is all that serves life; evil is all that serves death. Good is reverence for life (this is the main thesis of Albert Schweitzer, one of the great representatives of the love of life--both in his writings and in his person), and all that enhances life. Evil is all that stifles life, narrows it down, {24} cuts it into pieces. Thus it is from the standpoint of life-ethics that the Bible mentions as the central sin of the Hebrews: "Because thou didst not serve thy Lord with joy and gladness of heart in the abundance of all things." The conscience of the biophilous person is not one of forcing oneself to refrain from evil and to do good. It is not the superego described by .Freud, a strict taskmaster employing sadism against oneself for the sake of virtue. The biophilous conscience is motivated by its attraction to life and joy; the moral effort consists in strengthening the life loving side in oneself. For this reasons the biophile does not dwell in remorse and guilt, which are, after all, only aspects of self-loathing and sadness. He turns quickly to life and attempts to do good. Spinoza's Ethics is a striking example of biophilic morality. "Pleasure," he says, "in itself is not bad but good; contrariwise, pain in itself is bad." And in the same spirit: "A free man thinks of death least of all things; and his wisdom is a meditation not of death but of life." Love of life underlies the various versions of humanistic philosophy. In various conceptual forms these philosophies are in the same vein as Spinoza's; they express the principle that the same man loves life; that man's aim in life is to be attracted by all that is alive and to separate himself from all that is dead and mechanical. The dichotomy of biophilia-necrophilia is the same as Freud's life-and-death instinct. I believe, as Freud did, that this is the most fundamental polarity that exists. However, there is one important difference. Freud assumes that the striving toward death and toward life are two biologically given tendencies inherent in all living substance that their respective strengths are relatively constant, and that there is only one alternative within the operation of the death instinct--namely, that it can be directed against the outside world or against oneself. In contrast to these assumptions I believe that necrophilia is not a normal biological tendency, but a pathological phenomenon--in fact, the most malignant pathology that exists in mail. What are we, the people of the United States today, with respect to necrophilia and biophilia? Undoubtedly our spiritual tradition is one of love of life. And not only this. Was there ever a culture with more love of "fun" and excitement, or with greater opportunities for the majority to enjoy fun and excitement? But even if this is so, fun and excitement is not the same as joy and love of life; perhaps underneath there is indifference to life, or attraction to death? To answer this question we must consider the nature of our bureaucratized, industrial, mass civilization. Our approach to life becomes increasingly mechanical. The aim of social efforts is to produce things, and. in the process of idolatry of things we transform ourselves into commodities. The question here is not whether they are treated nicely and are well fed (things, too, can be treated nicely); the question is whether people are things or living beings. People love mechanical gadgets more than living beings. The approach to man is intellectualabstract. One is interested in people as objects, in their common properties, in the statistical rules of mass behavior, not in living individuals. All this goes together with the increasing role of bureaucratic methods. In giant centers of production, giant cities, giant countries, men are administered as if they were things; men and their administrators are transformed into things, and they obey the law of things. In a bureaucratically organized and centralized industrialism, men's tastes are manipulated so that they consume maximally and in predictable and profitable directions. Their intelligence and character become standardized by the ever-increasing use of tests, which select the mediocre and unadventurous over the original and daring. Indeed, the bureaucratic-industrial civilization that has been victorious in Europe and North America has created a new type of man. He has been described as the "organization man" and as homo consumens. He is in addition the homo mechanicus. By this I mean a "gadget man," deeply attracted to all that is mechanical and inclined against all that is alive. It is, of course, true that man's biological and physiological equipment provides him with such strong sexual impulses that even the homo mechanicus still has sexual desires and looks for women. But there is no doubt that the gadget man's interest in women is diminishing. A New Yorker cartoon pointed to this very amusingly: a sales girl trying to sell a certain brand of perfume to a young female customer recommends it by remarking, "It smells like a new sports car." Indeed, any observer of men's behavior today will confirm that this cartoon is more than a clever joke. There are apparently a great number of men who are more interested in sports-cars, television and radio sets, space travel, and any number of gadgets than they are in women, love, nature, food; who are more stimulated by the manipulation of non-organic, mechanical things than by life. Their attitude toward a woman is like that toward a car: you push the button and watch it race. It is not even too farfetched to assume that homo mechanicus has more pride in and is more fascinated by, devices that can kill millions of people across a distance of several thousands of miles within minutes than he is frightened and depressed by the possibility of such mass destruction. Homo mechanicus still likes sex {25} and drink. But all these pleasures are sought for in the frame of reference of the mechanical and the unalive. He expects that there must be a button which, if pushed, brings happiness, love, pleasure. (Many go to a psychoanalyst under the illusion that he can teach them to find the button.) The homo mechanicus becomes more and more interested in the manipulation of machines, rather than in the participation in and response to life. Hence he becomes indifferent to life, fascinated by the mechanical, and eventually attracted by death and total destruction. This affinity between the love of destruction and the love of the mechanical may well have been expressed for the first time in Marinetti's Futurist Manifesto (1909). "A roaring motor-car, which looks as though running on a shrapnel is more beautiful than the Victory of Samothrace. … We wish to glorify war--the only health-giver of the world-militarism, patriotism, the destructive arm of the Anarchist, the beautiful Ideas that kill the contempt for woman." Briefly then, intellectualization, quantification, abstractification, bureaucratization, and reification--the very characteristics of modern industrial society--when applied to people rather than to things are not the principles of life but those of mechanics. People living in such a system must necessarily become indifferent to life, even attracted to death. They are not aware of this. They take the thrills of excitement for the joys of life and live under the illusion that they are very much alive when they only have many things to own and to use. The lack of protest against nuclear war and the discussion of our "atomologists" of the balance sheet of total or half-total destruction show how far we have already gone into the "valley of the shadow of death."1 To speak of the necrophilous quality of our industrial civilization does not imply that industrial production as such is necessarily contrary to the principles of life. The question is whether the principles of social organization and of life are subordinated to those of mechanization, or whether the principles of life are the dominant ones. Obviously, the industrialized world has not found thus far an answer, to the question posed here: How is it possible to create a humanist industrialism as against the bureaucratic mass industrialism that rules our lives today? The danger of nuclear war is so grave that man may arrive at a new barbarism before he has even a chance to find the road to a humanist industrialism. Yet not all hope is lost; hence we might ask ourselves whether the hypothesis developed here could in any way contribute to finding peaceful solutions. I believe it might be useful in several ways. First of all, an awareness of our pathological situation, while not yet a cure, is nevertheless a first step. If more people became aware of the difference between love of life and love of death, if they became aware that they themselves are already far gone in the direction of indifference or of necrophilia, this shock alone could produce new and healthy reactions. Furthermore, the sensitivity toward those who recommend death might be increased. Many might see through the pious rationalizations of the death lovers and change their admiration for them to disgust. Beyond this, our hypothesis would suggest one thing to those concerned with peace and survival: that every effort must be made to weaken the attraction of death and to strengthen the attraction of life. Why not declare that there is only one truly dangerous subversion, the subversion of life? Why do not those who represent the traditions of religion and humanism speak up and say that there is no deadlier sin than love for death and contempt for life? Why not encourage our best brains--scientists, artists, educators--to make suggestions on how to arouse and stimulate love for life as opposed to love for gadgets? I know love for gadgets brings profits to the corporations, while love for life requires fewer things and hence is less profitable. Maybe it is too late. Maybe the neutron bomb, which leaves entire cities intact, but without life, is to be the symbol of our civilization. But again, those of us who love life will not cease the struggle against necrophilia.

## off

#### Nuclear production locks in productionism through obsession with finance, competitiveness and technological solutions

**Maciejewska and Marszalek ’11** (Malgorzata, institute of Sociology and Faculty of Social Sciences at Wroclaw University, and Marcin, Wroclaw University (Poland), “Lack of power or lack of democracy: the case of the projected nuclear power plant in Poland,” Economic and Environmental Studies Vol. 11, No.3 (19/2011), 235-248, Sept. 2011, AM)

The mainstream discourse on nuclear power rarely takes up the question of how the global energy industry is organized. In the modern economy the production of energy around the world, which is supposed to be a kind of public good and to guarantee sustainable development, is planned and arranged under free market conditions. As a part of the global chain of extraction, production and trading, it is subordinated to the neoliberal logic on terms of which the society and economy is governed as a business enterprise with the logic of maximum interest and minimum loss. This imposes on different actors (from the international corporations to individual households) the discipline of competitiveness and profitability, resulting in the growth of existing inequalities as ‘the invisible hand’ of the free market economy legitimizes those subjects which are already in power. The modern global economy is based on irrational production and social inequalities where one can observe the processes of work intensification and the cheapening of labor. The markets are dominated by the unproductive virtual economy (See Peterson, 2002) where the major players are the financial institutions which, by means of sophisticated financial tools, buy and sell virtual products (currencies, stocks, insurances, debts and its derivatives). In effect, the major actors in the capitalist economy are the international investors who have the capability of financial liquidity, and operate with those sophisticated financial tools on the global stock market. Even when they lose those capacities because of indebtedness, the states and international organizations seem often to be willing to repair the damage by transferring the taxes paid by citizens. (This is actually happening now, during the financial crisis, when southern and western European countries are subjected to shock therapy under which governments introduce austerity measures.) The praxis of nuclear power producers and the discourse which legitimizes it is therefore reduced to one goal – increasing financial revenues. The Polish plan to build the atomic power plant seems to be another element of the competitiveness strategy. In the authorities’ mind set it could put Poland into the position of more a competitive, more dynamic economy, as expected by the European Union and international organizations such as the International Monetary Fund or the World Bank. The welfare of Poland’s or Niger’s society does not fit into that picture. The nuclear establishment does not take into account the most important aspect of sustainable development: the overall reduction of energy consumption and therefore of energy production. Such a policy could bring a wide range of profits to the societies, the ecosystem, as well as the economy. On the contrary, the increase of power production and power use is one of the core concepts of pro-atomic discourse. This dogmatic belief draws the ideological line indicated at the beginning: the question of energy use and the ideas for solving this problem are seen only as a matter of technological challenges and the amount of financial and material means which have to be invested in them, but not as an effort to re-organize and restructure the modern economy.

#### The IDEOLOGICAL commitment to energy producivism key to consumption -causes tech positivism, ecoinjustice and neoliberal expansionism - EXTINCTION

Byrne et al 9

[http://bst.sagepub.com/content/29/2/81.full.pdf+html](http://bst.sagepub.com/content/29/2/81.full.pdf%2Bhtml)

“Living Well”: Growth Without End Since the industrial revolution, social progress has been measured by material affluence. In turn, assuring wealth and its increase has been the responsibility of a set of institutions capable of planning for and (hopefully) delivering a boundless frontier of expanding production and consumption. Indeed, living well in modern times means an existence assured of a free and constantly rising flow of goods and services delivered conveniently and, ideally, at low cost.3 Perpetual acts of buying and selling adorn daily life as moderns dedicate time and imagination to shopping at levels unknown in human history. This commitment to the search for and absorption of more represents a “cornucopian” predisposition embedded in the micro- to macro-scales of modern life—from the personality of the modern individual to the culture and political economy of modern society (Byrne & Yun, 1999). Making this feature of modern life work in real time is no easy task. It requires unending engineered change in products and production and in parallel, continual change in consumption preferences designed by advertising. Production and marketing techniques shape and serve, on a grand scale, an ethos of unconstrained producing, shopping, and buying. Planned obsolescence is a necessary practice, applied to all goods, from toys to automobiles to computers to buildings, and even to social relationships and personalities;4 all have designed shelf lives when they are to be discarded for new and improved versions. In this manner, market demand grows synergistically with the modern hum of progress. More than 50 years ago, a market analyst could readily describe the economic and technological logic underpinning modern success (Lebow, 1955). Our enormously productive economy demands that we make consumption a way of life, that we convert the buying and use of goods into rituals, that we seek our spiritual satisfaction, our ego satisfaction, in consumption. We need things consumed, burned up, replaced, and discarded at an ever-increasing rate. (p. 5) The lubricant for successful obsolescence is a finance system able to supply (and profit from) a wide range of credit facilities from installment buying to capitalized production. These facilities ensure that buying can keep up with producing, even if there is not enough money ready at hand.5 Growth without end is, in this way, institutionalized as a permanent goal of modern society. By the last quarter of the 20th century, the complex system of ceaseless growth had proved to be so successful that moderns could reason that the reality manufactured by human institutions is palpably superior to the one embodied in natural existence. From the thermostatically controlled air-conditioned, centrally heated and equably humidified colonial farmhouses in the city, we may bowl along limited access highways in our private air-conditioned maximum visibility bubbles at 60 miles per hour, accompanied by a full orchestra, and arrive in the parking decks of our multi-deck air conditioned, pedestrian/traffic segregated urban centers, for work, education, shopping or culture, without ever venturing into the open air! (Lewis, 1969, p. 311) A life involving less and less interaction with the natural world has quickly become a hallmark of living well as nearly 90% of the 24-hour day is now spent indoors (Fisk, 2000). Norms of “efficiency, rationality, optimizing and ‘time-saving’ behavior” justify the organization of human life beyond the confines of suboptimal nature (O’Hara & Stagl, 2001, p. 540). Separation from the natural world is facilitated and reinforced by technological advancements which collapse the boundaries of space and time enabling social transactions without natural limitation. In fact, the middle and upper classes of wealthy societies have little or no need to venture outside. The resulting social alienation from nature leaves mostly the poor to witness the environmental consequences of endless growth. Only their livelihoods are immediately and significantly threatened by the “normal pollution” of modernity (see Byrne, Glover, & Martinez, 2002). Until pictures, video, and text on environmental harm are found online, the middle class cannot experience it. And this is (partly) why middle class environmentalism seeks redress in technological positivism. The everyday of indoor life is protected and nourished by technology; so why shouldn’t this work for the outdoors as well? Energy Obesity The commodification of human life and nature are the foundations of the modern thrust. Together, these forces changed the direction of human and natural history, creating the distinct era in which life, in all forms, now transpires. But the modern era needed and continues to need a special ingredient—energy. This was recently confirmed by the chairman of the U.S. Federal Reserve Board (Bernanke, 2006). At the most basic level, oil and natural gas are just primary commodities, like tin, rubber, or iron ore. Yet energy commodities are special, in part because they are critical inputs to a very wide variety of production processes of modern economies. They provide the fuel that drives our transportation system, heats our homes and offices, and powers our factories. For modern life, energy is the one commodity always needed to make and use anything. In this respect, energy supply is what enables the pursuit of boundless growth; because of modern energy, we can aspire to produce and possess everything. The modern energy system epitomizes its age. Lovins and others roundly criticized its evolution on the ground that its scale and volume are poorly matched to the often much smaller scales and volumes of energy use. But the criticism misses a key point: the mismatch is, in fact, by design; it is essential for modern society to reproduce itself. After all, the potential for incessant growth can only be exploited if an ever-present capacity to fuel such growth exists. Having just enough energy presumes the nonsensical idea of just enough growth; there is never enough growth in the modern era. Lewis Mumford’s thoughtful, in-depth analysis (1934, 1961, and 1970) explains why energy is special in our time. Modern energy systems only come in extra large sizes because “quantitative production has become, for our mass-minded contemporaries, the only imperative goal: they value quantification without qualification” (Mumford, 1961, p. 57). Volume and scale of output are the standard bearers of serious energy options because these are the shared metrics of the alliance of science, capitalism, and carbon power. All three run on the principle that more is better; more knowledge, more power, and more commodities are signs of progress. As a Mumford contemporary has observed, excessive accumulation of energy sustains the modern “social metabolism” (Martinez-Alier, 2006): Energy is not a “sector” of the economy. On the contrary, the market economy as a whole is only one part of the human ecology that must be characterized in terms of the human influence on the flows of energy and materials and interference in the biogeochemical cycles (for instance, in the carbon cycle, with the enhanced greenhouse effect). (p. 37, 55) The wealth-energy association and its concomitant environmental needs has produced a feedback loop: the physical processes that produce material wealth are reliant on energy regimes which foster continued growth of output; increased growth in resource use and consumptive demand (through planned obsolescence and advertising) create and reinforce social norms and obligations to increase consumption; increased demand encourages expansion of the physical processes that produce material wealth; and so on. Perpetuation of this self-sealing logic is a defining characteristic of the modern energy regime, with little distinction between public and private operations. For example, critiques of the centralized energy monopolies and oligopolies from “big oil” to “giant” electric utilities (Pinchot & Ettinger, 1925; Yergin, 1991) were answered by public replicas of the large, complex, and hierarchically managed energy systems: the Tennessee Valley Authority, the Bonneville Power Administration, and the Rural Electrification Administration. These public programs reinforce, rather than oppose, the structures of energy obesity. Much like biophysical obesity, energy obesity is driven by the need to expand without regard to quality of life. Its motive is the commodification of human life and the environment so that growth without end can be served. Thus, living well rests, in the modern case, on the antihealth ideal of energy obesity, and climate change represents, in scale, its most extensive threat to life in all forms.5

#### Rejec the aff’s neoliberal ideology. Energy debates should focus on CRITIQUE of broad structures INSTEAD of producitivist fixes. Our ROLE OF THE BALLOT is best EVEN IF they win some truth claims – we must SHIFT THE FRAME

Zehner 12

Green illusions,

Ozzie Zehner is the author of Green Illusions and a visiting scholar at the University of California, Berkeley. His recent publications include public science pieces in Christian Science Monitor, The American Scholar, Bulletin of the Atomic Scientists, The Humanist, The Futurist, and Women’s Studies Quarterly. He has appeared on PBS, BBC, CNN, MSNBC, and regularly guest lectures at universities. Zehner’s research and projects have been covered by The Sunday Times, USA Today, WIRED, The Washington Post, Business Week and numerous other media outlets. He also serves on the editorial board of Critical Environmentalism. Zehner primarily researches the social, political and economic conditions influencing energy policy priorities and project outcomes. His work also incorporates symbolic roles that energy technologies play within political and environmental movements. His other research interests include consumerism, urban policy, environmental governance, international human rights, and forgeries. Zehner attended Kettering University (BS -Engineering) and The University of Amsterdam (MS/Drs – Science and Technology Studies). His research was awarded with honors at both institutions. He lives in San Francisco.

Since this book represents a critique of alternative energy, it may seem an unlikely manual for alternative-energy proponents. But it is. Building alternative-energy infrastructure atop America's present economic, social, and cultural landscape is akin to building a sandcastle in a rising tide. A taller sand castle won't help. The first steps in this book sketch a partial blueprint for making alternative-energy technologies relevant into the future. Technological development alone will do little to bring about a durable alternative-energy future. Reimagining the social conditions of energy use will. Ultimately, we have to ask ourselves if environmentalists should be involved in the business of energy production (of any sort) while so many more important issues remain vastly underserved. Over the next several decades, it's quite likely that our power production cocktail will look very much like the mix of today, save for a few adjustments in market share. Wind and biofuel generation will become more prevalent and the stage is set for nuclear power as well, despite recent catastrophes. Nevertheless, these changes will occur over time—they will seem slow. Every power production mechanism has side effects and limitations of its own, and a global shift to new forms of power production simply means that humanity will have to deal with new side effects and limitations in the future. This simple observation seems to have gotten lost in the cheerleading for alternative-energy technologies. The mainstream environmental movement should throw down the green energy pom-poms and pull out the bifocals. It is entirely reasonable for environmentalists to criticize fossil-fuel industries for the harms they instigate. It is, however, entirely unreasonable for environmentalists to become spokespeople for the next round of ecological disaster machines such as solar cells, ethanol, and battery-powered vehicles. Environmentalists pack the largest punch when they instead act as power production watchdogs (regardless of the production method); past environmentalist pressures have cleaned the air and made previously polluted waterways swimmable. This watchdog role will be vital in the future as biofuels, nuclear plants, alternative fossil fuels, solar cells, and other energy technologies import new harms and risks. Beyond a watchdog role, environmentalists yield the greatest progress when addressing our social fundamentals, whether by supporting human rights, cleaning up elections, imagining new economic structures, strengthening communities, revitalizing democracy, or imagining more prosperous modes of consumption. Unsustainable energy use is a symptom of suboptimal social conditions. Energy use will come down when we improve these conditions: consumption patterns that lead to debt and depression; commercials aimed at children; lonely seniors stuck in their homes because they can no longer drive; kids left to fend for themselves when it comes to mobility or sexuality; corporate influence trumping citizen representation; measurements of the nation's health in dollars rather than well-being; a media concerned with advertising over insight, and so on. These may not seem like environmental issues, and they certainly don't seem like energy policy issues, but in reality they are the most important energy and environmental issues of our day. Addressing them won't require sacrifice or social engineering. They are congruent with the interests of many Americans, which will make them easier to initiate and fulfill. They are entirely realistic (as many are already enjoyed by other societies on the planet). They are, in a sense, boring. In fact, the only thing shocking about them is the degree to which they have been underappreciated in contemporary environmental thought, sidelined in the media, and ignored by politicians. Even though these first steps don't represent a grand solution, they are necessary preconditions if we intend to democratically design and implement more comprehensive solutions in the future. Ultimately, clean energy is less energy. Alternative-energy alchemy has so greatly consumed the public imagination over recent decades that the most vital and durable environmental essentials remain overlooked and underfunded. Today energy executives hiss silver-tongued fairy tales about clean-coal technologies, safe nuclear reactors, and renewable sources such as solar, wind, and biofuels to quench growing energy demands, fostering the illusion that we can maintain our expanding patterns of energy consumption without consequence. At the same time, they claim that these technologies can be made environmentally, socially, and politically sound while ignoring a history that has repeatedly shown otherwise. If we give in to accepting their conceptual frames, such as those pitting production versus production, or if we parrot their terms such as clean coal, bridge fuels, peacetime atom, smart growth, and clean energy, then we have already lost. We forfeit our right to critical democratic engagement and instead allow the powers that be to regurgitate their own terms of debate into our open upstretched mouths. Alternative-energy technologies don't clean the air. They don't clean the water. They don't protect wildlife. They don't support human rights. They don't improve neighborhoods. They don't strengthen democracy. They don't regulate themselves. They don't lower atmospheric carbon dioxide. They don't reduce consumption. They produce power. That power can lead to durable benefits, but only given the appropriate context. Ultimately, it's not a question of whether American society possesses the technological prowess to construct an alternative-energy nation. The real question is the reverse. Do we have a society capable of being powered by alternative energy? The answer today is clearly no. But we can change that. Future environmentalists will drop solar, wind, biofuels, nuclear, hydrogen, and hybrids to focus instead on women's rights, consumer culture, walkable neighborhoods, military spending, zoning, health care, wealth disparities, citizen governance, economic reform, and democratic institutions. As environmentalists and global citizens, it's not enough to say that we would benefit by shifting our focus. Our very relevance depends on it.

## off

Venture capital shifting to grid modernization now

NBC 12 [Dinah Wisenberg Brin, award-winning writer with a strong background producing financial, healthcare, government news, “Clean Tech Investing Shifts, With Lower-Cost Ventures Gaining Favor” March 1, http://www.cnbc.com/id/46222448/Clean\_Tech\_Investing\_Shifts\_With\_Lower\_Cost\_Ventures\_Gaining\_Favor]

**For many investors, that change means shifting funds from capital-intensive alternative-energy technologies**, such as solar panels, **to lower-cost ventures focused on energy efficiency and “smart grid” technologies** that automate electric utility operations.¶ “We continue to be very optimistic about things like the smart grid and the infusion of information technologies and software services” into old lines like electricity, agriculture and the built environment," says Steve Vassallo, general partner in Foundation Capital. “We’re very bullish on what I would consider the nexus of information technology and clean tech.”¶ Foundation, based in Menlo Park, Calif., reflects this in investments such as Sentient Energy Inc., a smart-grid monitoring company that allows utilities to remotely find power outages, and Silver Spring Networks, which provides utilities a wireless network for advanced metering and remote service connection.¶ Another holding, EnerNOC [ENOC 10.13 -0.22 (-2.13%) ], a demand-response business with technology to turn off noncritical power loads during peak periods, went public in 2007.¶ EMeter, a one-time Foundation investment, was recently acquired by Siemens Industry [SI 93.09 0.23 (+0.25%) ].¶ To be sure, investors have not abandoned costlier technologies with longer-term horizons, but many — put off, in part, by last year’s bankruptcy and shutdown of solar power firm Solyndra — now favor smaller infusions in businesses with a quicker potential payoff.¶ Rob Day, partner in Boston-based Black Coral Capital, says his cleantech investment firm maintains some solar holdings, but he sees a shift from an emphasis on those types of plays to more “intelligence-driven, software-driven, web-driven businesses.” These technologies can be used to improve existing businesses, he says.¶ One Black Coral smart-technology investment is Digital Lumens of Boston, which makes high-efficiency, low-cost LED lighting for warehouses and factories. Software and controls are embedded in the fixtures, which can cut lighting bills by 90 percent, providing customers a two-year payback, says Day. ¶ U.S. venture capital investment in cleantech companies hit $4.9 billion last year, down 4.5 percent in dollar terms but flat in the number of transactions, according to Ernst & Young LLP, which analyzed data from Dow Jones VentureSource. Cleantech companies raised 29 percent more capital last year than in 2009, E&Y said recently.¶ Most of that decline, however, came from less investment in sectors that were once hot.¶ Investment in energy and electric generation, including solar businesses, fell 5 percent to $1.5 billion, while that of industry products and services companies plunged 34 percent to $1 billion, according to E&Y's analysis of equity investments from venture capital firms, corporations and individuals.¶ The energy efficiency category leads the diverse industry in deals with 78 transactions worth $646.9 million. Energy-storage companies raised $932.6 million, a 250 percent increase and 47 percent deal increase.¶ “Cleantech is … a maturing industry. I think people are beginning to have worked through the early stages, figured out where the more attractive opportunities are and those less so, and meanwhile lots and lots of changes have occurred in the broader world,” says Dan Reicher, executive director of Stanford University’s Center for Energy Policy and Finance, and a faculty member of the university’s business and law schools.¶ Cleantech investment in 2011 brought a number of other important changes: Most of the money went to companies already generating revenue, the emergence of innovative contributions from the IT industry and extraordinary interest by the Chinese in large-scale, capital-intensive technology, such as energy hardware.¶ Many U.S. companies can’t get domestic backing for what they call the “valley of death” phase: between the VC-backed pilot plant and the fully commercialized facility. As a result, they are increasingly turning to China, says Reicher.¶ “There are clearly economic implications," he adds. "The wonderful fruits of our innovation in this country are increasingly being consumed in China, and that has implications for job creation here, for a whole host of things that are important to our economy and our security."¶ Stanford is developing a financing vehicle to address that valley, but Reicher says he couldn’t provide details yet.¶ “**You really want to see big impacts; you’ve got to put big money in**,” says Kilambi, the serial entrepreneur, who has experience raising large sums of investment capital.¶ Federal funding for cleantech is facing more political resistence in the wake of the Solyndra collapse.¶ President Obama has requested $2.27 billion in his 2013 budget, versus $3.2 billion the previous year. Congress, however, has approved less than the president's requests for the last three fiscal years, notes Reicher. ¶ Black Rock’s Day, who laments the politicization of the cleantech sector, suggests that investors look beyond Solyndra or the next election to what will happen over the next 20- or 50-year cycle.

Nuclear trades off with smart grid venture capital—that collapses the industry

Antony Froggatt, Senior Research Fellow at Chatham House, where he specializes in issues relating to climate change, EU energy policy and nuclear power, and Mycle Schneider works as an independent international consultant on energy and nuclear policy and advisor to German Environmental Agency, 10 [“Systems for Change: Nuclear Power vs. Energy Efficiency + Renewables?” Heinrich Böll Foundation, March, pdf]

Global experience of nuclear construction shows a tendency of cost overruns and delays. The history¶ of the world’s two largest construction programs, that of the United States and France, shows a five and¶ threefold increase in construction costs respectively. This cannot be put down to first of a kind¶ costs or teething problems, but systemic problems associated with such large, political and¶ complicated projects. Recent experience, in Olkiluoto in Finland and the Flamanville project in¶ France, highlight the fact that this remains a problem. The increased costs and delays with nuclear construction not only absorb greater and greater amounts of investment, but the delays increase the emissions from the sector. From a systemic point of view the nuclear and energy efficiency+renewable energy approaches¶ **clearly mutually exclude each other**, not only in investment terms. This is becoming increasingly¶ transparent in countries or regions where renewable energy is taking a large share of electricity¶ generation, i.e., in Germany and Spain. The main reasons are as follows.¶  Competition for limited investment funds. A euro, dollar or yuan can only be spent once¶ and it should be spent for the options that provide the largest emission reductions the¶ fastest. Nuclear power is not only one of the most expensive but also the slowest option.¶  Overcapacity kills efficiency incentives. Centralized, large, power‐generation units tend to¶ lead to structural overcapacities. Overcapacities leave no room for efficiency.¶  Flexible complementary capacity needed. Increasing levels of renewable electricity sources¶ will need flexible, medium‐load complementary facilities and not inflexible, large, baseload¶ power plants.¶  Future grids go both ways. **Smart metering and smart grids are on their way**. The logic is an¶ entirely redesigned system where the user gets also a generation and storage function. This¶ is radically different from the top‐down centralized approach.¶ For future planning purposes, in particular for developing countries, it is crucial that the¶ contradictory systemic characteristics of the nuclear versus the energy efficiency+renewable energy¶ strategies are clearly identified. There are numerous system effects that have so far been¶ insufficiently documented or even understood. Future research and analysis in this area is urgently¶ needed.¶ This is particularly important at the current time because the next decade will be vital in determining¶ the sustainability, security and financial viability of the energy sector for at least a generation.

Solves competitiveness, economic collapse, and giant blackouts

Stephen Chu, Nobel Prize is Physics, 12 [“America’s Competitiveness Depends on a 21st Century Grid,” May 30, Energy.Gov, http://energy.gov/articles/america-s-competitiveness-depends-21st-century-grid] PMA=Power Marketing Administrations

Upgrades are Key to American Competitiveness¶ The leadership of the PMAs is critically important because America’s continued global competiveness in the 21st century will be significantly affected by whether we can efficiently produce and distribute electricity to our businesses and consumers, seamlessly integrating new technologies and new sources of power.¶ Other countries are moving rapidly to capitalize on cost-saving new smart grid and transmission technologies -- and we will find ourselves at a competitive disadvantage unless we do the same. Blackouts and brownouts already cost our economy tens of billions of dollars a year, and we risk ever more serious consequences if we continue to rely on outdated and inflexible infrastructure. For example, across the country, most of the transmission lines and power transformers we depend upon are decades old and in many cases nearing or exceeding their expected lifespan.¶ Lessons of the September 2011 Blackout¶ One recent example of the challenges we face occurred in September 2011, when a relatively minor loss of a single transmission line triggered a series of cascading failures that ultimately left 2.7 million electric customers in Arizona, Southern California, and Baja California, Mexico without power, some for up to 12 hours. The customers of five utilities -- San Diego Gas and Electric (SDG&E), Imperial Irrigation District (IID), Western Area Power Administration-Lower Colorado (WALC), Arizona Public Service (APS), and Comision Federal de Electridad (CFE) -- lost power, some for multiple hours extending into the next day. ¶ Put simply, this disruption to the electric system could have been avoided. The investigation into the blackout conducted by the Federal Energy Regulatory Commission and the North American Electric Reliability Council concluded the system failure stemmed primarily from weaknesses in two broad areas: 1) operations planning and 2) real-time situational awareness. Without these two critical elements, system operators are unable to ensure reliable operations or prevent cascading outages in the event of losing a single component on the grid. **As our system ages, these situations threaten to become more frequent and even more costly.** ¶ The Role of the PMAs in Accelerating the U.S. Transition to a 21st Century Grid¶ Most of our nation’s electric transmission system is privately owned. However, the federal government directly owns and controls significant portions of the electric transmission system through its four PMAs, created to market and distribute hydroelectric power from federally owned dams. The PMAs, part of the Energy Department, are responsible for more than 33,000 miles of transmission that overlay the transmission systems of utilities in 20 states, which represent about 42% of the continental United States. The PMAs provide the federal government the ability to lead by example in modernizing and securing our nation’s power grid, or risk putting the entire system -- and America’s economy -- at risk. The benefits of action, as well as the risks and consequences of inaction, could directly or indirectly affect nearly every electricity consumer and every business in the United States. ¶ This is why my March 16th memo set forth foundational goals that DOE is considering for the PMAs. This is part of a much broader effort to transition to a more flexible and resilient electric grid and establish much greater coordination among system operators.

## off

#### Obama has the influence to prevail in fiscal cliff negotiations now---political capital is key

Sprung, 9/21

(Andrew Sprung is a political commentator & media consultant. He is the CEO of Sprung PR and hold a PhD from the University of Rochestor, “Ezra Klein's unconvincing theory that Obama misunderstands (or misrepresents) "change," http://xpostfactoid.blogspot.com/2012/09/ezra-kleins-unconvincing-theory-that.html)

In my view, Klein is viewing this question too narrowly. Obama is well aware of the limitations of the bully pulpit, and he's got to know better than any person on the planet that presidential advocacy polarizes, entrenching the opposing party in implacable opposition to whatever the president proposes. Yet, in presenting a revamped theory of how the presidency works, he's not just feeding us a line of BS. And if Obama wins reelection, I believe that we will look back five or ten or twenty years from now and recognize that yes, Obama did change the way Washington works. Or at the very least, he kept the US on a sane policy course in a time of extreme polarization and thus gave (will have given...) the system space to self-correct, as it has in the past. Let's start with Klein's objection to Obama's characterization of how healthcare reform got done: The health-care process, which I reported on extensively, was a firmly “inside game” strategy. There were backroom deals with most every major interest group and every swing legislator.... By the time the law passed, many more Americans viewed it unfavorably than viewed it favorably — exactly the opposite of what you’d expect if health care had passed through an “outside game” strategy in which, as Obama put it, “the American people … put pressure on Congress to move these things forward.” And yet, health care passed. The inside game worked. All true, laddie. And yet, in claiming that the impetus for healthcare reform came from the outside, I don't think Obama is attempting to whitewash this long and messy process -- or is even referring to it. He is alluding to the marshaling or channeling of popular will that got him elected. The essence of Obama's primary election argument against Hillary Clinton was that he was better equipped to marshal the popular will for fundamental change -- with healthcare reform as the centerpiece -- than she was. I well remember the moment when that argument first impressed itself on me. It was in a debate in the immediate aftermath of the Iowa caucuses, on Jan. 5, 2008: Look, I think it's easier to be cynical and just say, "You know what, it can't be done because Washington's designed to resist change." But in fact there have been periods of time in our history where a president inspired the American people to do better, and I think we're in one of those moments right now. I think the American people are hungry for something different and can be mobilized around big changes -- not incremental changes, not small changes. I actually give Bill Clinton enormous credit for having balanced those budgets during those years. It did take political courage for him to do that. But we never built the majority and coalesced the American people around being able to get the other stuff done. And, you know, so the truth is actually words do inspire. Words do help people get involved. Words do help members of Congress get into power so that they can be part of a coalition to deliver health care reform, to deliver a bold energy policy. Don't discount that power, because when the American people are determined that something is going to happen, then it happens. And if they are disaffected and cynical and fearful and told that it can't be done, then it doesn't. I'm running for president because I want to tell them, yes, we can. And that's why I think they're responding in such large numbers.

Cue the political science eye-roll. The American people were not "determined" that healthcare reform per se had to occur. You can't read the results of the 2008 wave election as a "mandate" for a specific policy. In the aftermath, the electoral tide went back out with a vengeance. But it's also true that in two years of campaigning Obama's words did inspire people, that the American people were hungry for change after Bush, that Obama made a broad and conceptually coherent case for moving the center of American politics back to the left with a renewed commitment to shared prosperity and investment in the common good, and that healthcare reform was at the center of that case. True too that the results of that election gave him enough of a majority to persist, even when relentless Republican misinformation and bad-faith negotiation and delay eroded public support. Obama also **used the bully pulpit at crucial point**s, if not to rally public opinion, at least **to re-commit wavering Democrats -**- and also to convince the public, as he enduringly has, that he was more of a **good faith negotiator**, more willing to compromise, than the Republicans. Those pressure points were the September 2009 speech he gave to a joint session of Congress, and the remarkable eight-hour symposium he staged with the leadership of both parties in late February 2010 to showcase the extent to which the ACA incorporated past Republican proposals and met goals allegedly shared by both parties, as well as his own bend-over-backwards willingness to incorporate any Republican ideas that could reasonably be cast as advancing those goals. In a series of posts about Ronald Reagan, Brendhan Nyhan has demonstrated that presidential rhetoric generally does not sway public opinion. Savvy politicians channel public opinion; transformative ones seize an opportunity when their basic narrative of where the country needs to go aligns with a shift in public opinion, usually in response to recent setbacks or turmoil. Obama, like Reagan, effected major change in his first two years because he caught such a wave -- he **amassed the political capital**, and he spent it, and we got what he paid for. The force from outside -- a wave election -- empowered Obama to work change from inside in a system that reached a new peak of dysfunctionality. Klein's also objects to Obama's pitch for how to effect change going forward. In 2011, he notes, Obama highlighted the substantial change won from the messy inside game of legislating, touting the long list of legislative accomplishments of the 111th Congress. In election season, he has reverted to a keynote of his 2008 campaign: change comes from you, the electorate; it happens when ”the American people … put pressure on Congress to move these things forward.” Klein regards this as election season hooey: But while this theory of change might play better, it’s the precise theory of change that the last few years have shattered. Whatever you want to say about the inside game, it worked. Legislation passed. But after the midterm elections, it stopped working. And so the White House moved towards an outside game strategy, where ”the American people … put pressure on Congress to move these things forward.” Perhaps the most public example was Obama’s July 2011 speech, in which he said: I’m asking you all to make your voice heard. If you want a balanced approach to reducing the deficit, let your member of Congress know. If you believe we can solve this problem through compromise, send that message. So many Americans responded that Congress’s Web site crashed. But Obama didn’t get his “balanced approach,” which meant a deal including taxes. Klein goes on to recount that throughout the past year of confrontation with the GOP, pushing a jobs package that had broad popular support, Obama won only one minor victory, extension of the payroll tax cut. He then reverts to two political science tenets: presidential advocacy entrenches the opposition, and it can't move popular opinion. But I think he misreads Obama's pitch, strategy and record on several counts. First, he **understates Obama's** (and the Democrats') **successes in the year of confrontation** that has followed the debt ceiling debacle. He writes off the payroll tax cut and unemployment benefit extension as small beer. But this was actually a near-total victory in two stages against entrenched opposition, and it won Obama some vital back-door stimulus for the second year running in the wake of the GOP House takeover. It was followed by a similar GOP cave-in on maintaining low student loan interest rates -- and then again, by the collapse of the House GOP effort to renege on the Budget Control Act and impose still more spending cuts. Presidential rhetoric may not change the public mind. But when it's in sync with voter's propensities, **it can deploy public opinion to bring pressure to bear on the opposition.** Second, it's true that under threat of GOP debt ceiling extortion, Obama successfully marshaled public opinion in favor of his "balanced" approach to deficit reduction but wasn't able to use that pressure to move the GOP off their no-new-taxes intransigence. **But that battle ain't over yet**, and popular support for Obama's position **is political capital that's still in the bank**. **In the upcoming fiscal cliff negotiations, Obama**, if he wins reelection, **will have the whip hand,** given the expiration of the Bush tax cuts and Republican teeth-gnashing over the defense cuts in the sequester. Speaking of which, Obama's refusal to intervene in the supercommittee negotiations as Republicans stonewalled once again over any tax hikes **banked him further capital in this upcoming fight**. Republicans are screaming much louder than Democrats about the sequester, disastrous though the cuts may be on the domestic side. Third, it's rational for Obama to recast his bid for change in election season, because of course he's seeking further "change" from the outside, i.e., more Democrats elected to Congress. He's not going to win a mandate as in 2008, or, most likely, majorities in both houses of Congress. But he has to make the pitch for being granted renewed tools to advance his agenda. Finally, a key part of Obama's "you are the change" pitch in his convention speech was a frank call to play defense -- to protect the changes wrought in his first term and fend off the further capture of the electoral process and the nation's resources by the oligarchy the GOP represents: If you turn away now – if you buy into the cynicism that the change we fought for isn’t possible … well, change will not happen. If you give up on the idea that your voice can make a difference, then other voices will fill the void: lobbyists and special interests; the people with the $10 million checks who are trying to buy this election and those who are making it harder for you to vote; Washington politicians who want to decide who you can marry, or control health-care choices that women should make for themselves.

#### Plan kills Obama

Petroleum Intelligence Weekly, 1/9/12, Obama Plays Safe on Energy Policy, Lexis

With less than a year to go **until he faces re-election**, US President Barack **Obama is trying to avoid controversial energy policy decisions**, postponing the finalization of restrictions on oil refinery and power plant emissions and delaying the approval of a major crude pipeline project. The president’s caution will prolong the status quo on issues where the industry both opposes and supports the administration’s plans, and also illustrates what's at stake for energy policy depending on whether or not Obama is given another four years in office. Most of Obama's original campaign **pledges on promoting alternatives to fossil fuels** and tackling climate change **have not passed muster with Congress**, most notably an ambitious plan for national carbon controls, a subsequent toned-down clean energy standard floated after the carbon legislation failed, and repeated efforts to repeal $30 billion-$40 billion worth of oil industry tax deductions over 10 years ( PIW May9'11 ). The one exception has been the passage of $90 billion in clean energy funding as part of an economic stimulus bill passed early in Obama's term, but **the White House has been unable to repeat** this **success in other energy policy areas** ( PIW Feb.23'09 ).

#### Presidential leadership is key to a compromise – the alternative is the collapse of hegemony, a double-dip recession, and war in the Middle East

Hutchison, U.S. Senator from the great state of Texas, 9/21/2012

(Kay Bailey, “A Looming Threat to National Security,” States News Service, Lexis)

Despite warnings of the **dire consequences**, **America is teetering at the edge of a fiscal cliff**, with January 1st, 2013 as the tipping point. On that date, **unless Congress and the White House can reach agreement** on how to cut the federal deficit, all taxpayers will be hit with higher taxes and deep cuts - called "sequestration" - will occur in almost all government spending, disrupting our already weak economy and putting our national security at risk.

According to the House Armed Services Committee, if sequestration goes into effect, it would put us on course for more than $1 trillion in defense cuts over the next 10 years. What would that mean? A huge hit to our military personnel and their families; devastating cuts in funding for critical military equipment and supplies for our soldiers; and **a** potentially **catastrophic blow to our** national defense and **security capabilities** in a time of increasing violence and danger.

All Americans feel a debt of gratitude to our men and women who serve in uniform. But Texas in particular has a culture that not only reveres the commitment and sacrifice they make to protect our freedom, we send a disproportionate number of our sons and daughters to serve.

The burden is not borne solely by those who continue to answer the call of duty, but by their families as well, as they endure separation and the anxiety of a loved one going off to war. These Americans have made tremendous sacrifices. They deserve better than to face threats to their financial security and increased risks to their loved ones in uniform, purely for political gamesmanship.

Sequestration would also place an additional burden on our economy. In the industries that support national defense, as many as 1 million skilled workers could be laid off. With 43 straight months of unemployment above 8 percent, it is beyond comprehension to add a virtual army to the 23 million Americans who are already out of work or under-employed. **Government and private economic forecasters warn that sequestration will push the country back into recession next year**.

The recent murder of our Ambassador to Libya and members of his staff, attacks on US embassies and consulates and continued riots across the Middle East and North Africa are stark reminders that great portions of the world remain volatile and hostile to the US. **We have the mantle of responsibility that being the world's lone super-power brings**. **In the absence of U.S. military leadership**, **upheaval in the Middle East would be worse**. **As any student of history can attest**, **instability does not confine itself to national borders**. **Strife that starts in one country can spread like wildfire across a region**.

Sequestration's cuts would reduce an additional 100,000 airmen, Marines, sailors and soldiers. That would leave us with the smallest ground force since 1940, the smallest naval fleet since 1915 and the smallest tactical fighter force in the Air Force's history. With the destabilization in the Middle East and other areas tenuous, we would be left with a crippled military, **a diminished stature internationally and a loss of technological** research, development and **advantage** - just as actors across the globe are increasing their capabilities.

Sequestration can still be avoided. **But that will require leadership from the President** that has thus far been missing. Congress and the White House must reach a long-term agreement to reduce $1 trillion annual budget deficits, without the harsh tax increases that could stall economic growth and punish working families.

#### Middle East goes nuclear

James A. **Russell,** Senior Lecturer, National Security Affairs, Naval Postgraduate School, ‘9 (Spring) “Strategic Stability Reconsidered: Prospects for Escalation and Nuclear War in the Middle East” IFRI, Proliferation Papers, #26, http://www.ifri.org/downloads/PP26\_Russell\_2009.pdf

Strategic stability in the region is thus undermined by various factors: (1) asymmetric interests in the bargaining framework that can introduce unpredictable behavior from actors; (2) the presence of non-state actors that introduce unpredictability into relationships between the antagonists; (3) incompatible assumptions about the structure of the deterrent relationship that makes the bargaining framework strategically unstable; (4) perceptions by Israel and the United States that its window of opportunity for military action is closing, which could prompt a preventive attack; (5) the prospect that Iran’s response to pre-emptive attacks could involve unconventional weapons, which could prompt escalation by Israel and/or the United States; (6) the lack of a communications framework to build trust and cooperation among framework participants. These systemic weaknesses in the coercive bargaining framework all suggest that escalation by any the parties could happen either on purpose or as a result of miscalculation or the pressures of wartime circumstance. Given these factors, it is disturbingly easy to imagine scenarios under which a conflict could quickly escalate in which the regional antagonists would consider the use of chemical, biological, or nuclear weapons. It would be a mistake to believe the nuclear taboo can somehow magically keep nuclear weapons from being used in the context of an unstable strategic framework. Systemic asymmetries between actors in fact suggest a certain increase in the probability of war – a war in which escalation could happen quickly and from a variety of participants. Once such a war starts, events would likely develop a momentum all their own and decision-making would consequently be shaped in unpredictable ways. The international community must take this possibility seriously, and muster every tool at its disposal to prevent such an outcome, which would be an unprecedented disaster for the peoples of the region, with substantial risk for the entire world.

## off

#### The United States federal government should establish a Quadrennial Energy Review. In the Quadrennial Energy Review, the United States federal government should include a recommendation to establish a matching funds program and reduce licensing restrictions for Liquid Fluoride Thorium power production in the United States.

CP solves:

#### Recommending plan mandates through a QER process solves—only the CP creates policy sustainability and private sector coordination that unlocks energy innovation

Moniz 12

Ernest Moniz, Cecil and Ida Green Professor of Physics and Engineering Systems and Director of the Energy Initiative at the Massachusetts Institute of Technology; Former Clinton Administration Under Secretary of the Department of Energy and as Associate Director for Science in the Office of Science and Technology Policy ; serves on the President’s Council of Advisors on Science and Technology, Spring 2012, Stimulating Energy Technology Innovation, Daedalus, Vol. 141, No. 2, Pages 81-93

It should come as no surprise that I do not have the answers for how the government should intersect the latter stages of the innovation process in a general sense. However, PCAST recommended a pragmatic approach to an integrated federal energy policy that would employ all the tools available to the government in a coherent way. Termed **the** Quadrennial Energy Review (**QER**), the process is necessarily complex, but **history suggests** that **anything short of a full multiagency effort is unlikely to provide a robust plan that accounts for the many threads of an energy policy**. Furthermore, a degree of analysis is required that has not been present in previous efforts.

Energy policy is derivative of many policies: environment, technology and competitiveness, diplomacy and security, natural resources, and land and food, among many others. Indeed, multiple agencies that are not labeled “energy” have major equities and long-held perspectives on key elements of energy policy. Often, the preferred policies for different agencies’ agendas conflict. Further, states and local governments play a strong role, for example with building codes, and their approaches can vary dramatically in different parts of the country; certainly, California’s energy policies have influenced the national market. The tools available to support innovation are also diverse, ranging from direct support of RD&D to a variety of economic incentives, regulation, standards, and federal procurement, among other instruments. Congress is equally fragmented: in the House of Representatives and Senate, many committees beyond those tasked with energy policy have equities that mirror those of the different executive agencies. **To overcome this fragmentation** of responsibilities and perspectives, and **especially if the goal is a plan that has staying power in advancing adoption and diffusion, PCAST recommended a QER process** to provide a multiyear roadmap that:

• lays out an integrated view of short-, intermediate-, and long-term objectives for Federal energy policy in the context of economic, environmental, and security priorities;

• outlines **legislative proposals** to Congress;

• puts forward anticipated Executive actions (programmatic, regulatory, fiscal, and so on) coordinated across multiple agencies;

• **identifies resource requirements** for the RD&D programs **and** for innovation **incentive programs**; and, most important,

• provides a strong analytical base.14

This is a tall order intellectually and organizationally. Several process elements are essential to fostering a chance for success. First, the Executive Office of the President (eop) must use its convening power to ensure effective cooperation among the myriad relevant agencies. However, the capacity to carry out such an exercise and to sustain it does not (and should not) reside in the eop. The doe is the logical home for a substantial Executive Secretariat supporting the eop interagency process that would present decision recommendations to the president. However, the scope of the analytical capability needed does not currently reside at the doe or any other agency. The doe needs to build this capability, presumably supplemented by contractor support to gather data, develop and run models, and carry out analysis, such as independent energy-system engineering and economic analysis. Market trends and prices would be part of the analysis, including international markets and robust analyses of uncertainty. The Energy Information Administration can help with some data gathering and models, but its independence from the policy function needs to be preserved. The national laboratories also lack this range of functions, and tasking them with providing the analytical support to the policy process would be regarded as a conflict of interest; their focus is best directed at research, invention, and technology transfer. Building this analysis capacity is a large job that will take time.

For the QER to succeed, the government must seek substantial input from many quarters in a transparent way; certainly, ongoing dialogue with Congress and the energy industry are essential. The good news is that members of Congress have supported the development of the QER as a way to present a coherent **starting point for congressional action across many committees.** A hope is that **Congress could then use the QER as a basis for** a four or five-year **authorization that would provide the private sector with the increased confidence needed to make sound clean energy investment decisions**.

Given the magnitude of the task, PCAST recommended in 2011 that the doe carry out a Quadrennial Technology Review (qtr)–a first step centered in a single department and focused on technology. The qtr resulted in a rebalancing of the R&D portfolio toward the oil dependence challenge through advanced vehicle development, particularly transportation electrification. The key now will be to extend the processes developed for the qtr to the multiagency QER, involving the eop in a leadership role. Taking the next steps in 2012 will maintain momentum and establish the capabilities needed for the QER by early 2015, the time frame recommended by PCAST.

While some may view 2015 as a frustratingly long time away, the alternative is to rely on wishes rather than analysis while failing to gain multiple perspectives in a fair and open manner. **Rushing the process will result in a poorly done job that will not accomplish** any of the **key** QER **goals**. Certainly, **it will not bring together succeeding administrations and Congresses around a** reasonably **shared vision** and set of objectives **that can accelerate innovation in service of national competitiveness and environmental and security goals. Continuing with fragmented** and economically inefficient **policies, technologies “du jour,” and frequent shifts will complicate private-sector decisions rather than facilitate innovation**. The government unavoidably plays a strong role in the innovation process, even when this is unacknowledged in policy and political debates. The issue now is to present both a set of principles and fact-based analyses supporting coordinated government-wide actions that earn decent buy-in from major stakeholders.

[Note: PCAST = President’s Council of Advisors on Science and Technology]

## solvency

## 1nc solvency frontlines

Nuclear’s too expensive

Folbre, professor of economics – University of Massachusetts, Amherst, 3/26/’12

(Nancy, “The Nurture of Nuclear Power,” <http://economix.blogs.nytimes.com/2012/03/26/the-nurture-of-nuclear-power/>)

Remember the brouhaha about $563 million in Obama administration loan guarantees to Solyndra, the solar panel manufacturer that went belly up last fall? Neither President Obama nor Republicans in Congress have voiced opposition to an expected $8.3 billion Energy Department guarantee to help the Southern Company, a utility giant, build nuclear reactors in Georgia. Pressed to respond to the comparison, Representative Cliff Stearns, Republican of Florida and chairman of the Energy and Commerce subcommittee on oversight and investigations, explained that the loan guarantee for nuclear power plant construction was for a “proven industry that has been successful and has established a record.” The nuclear power industry has certainly established a record – for terrifying accidents. Most recently, the Fukushima Daiichi disaster in Japan led to the evacuation of 90,000 residents who have yet to return home and to the resignation of the prime minister. It prompted the German government to begin phasing out all nuclear generation of electricity by 2022. Yet the industry has proved remarkably successful at garnering public support in the United States, ranging from public insurance against accident liability to loan guarantees. An article last year in The Wall Street Journal observed that subsidies per kilowatt hour during its initial stages of development far exceeded those provided to solar and wind energy technologies. According to a detailed report published by the Union of Concerned Scientists, subsidies to the nuclear fuel cycle have often exceeded the value of the power produced. Buying power on the open market and giving it away for free would have been less costly. Heightened concerns about safety have driven recent cost estimates even higher, scaring off most private investors. Travis Hoium, an analyst who has written extensively about the industry on the investment Web site The Motley Fool, calls nuclear power a dying business. In an article, “Warren Buffett Wants a Subsidy From You,” he clearly explains recent efforts to shift risk from investors to ratepayers by allowing utilities to charge for construction in advance. Investor interest in nuclear-generated electricity has declined partly as a result of the boom in shale gas extraction. But energy sources that don’t increase carbon emissions are also playing a major role, with wind, hydropower and other renewables projected to provide about 30 percent of expected additions to power generation capacity in the United States between 2010 and 2035.

## 1nc at: thorium

No solvency - laundry list - no one will adopt it

Eifion **Rees 11**, The Guardian, “Don't believe the spin on thorium being a greener nuclear option”, June 23, <http://www.guardian.co.uk/environment/2011/jun/23/thorium-nuclear-uranium>

There is a significant sticking point to the promotion of thorium as the 'great green hope' of clean energy production: it remains unproven on a commercial scale. While it has been around since the 1950s (and an experimental 10MW LFTR did run for five years during the 1960s at Oak Ridge National Laboratory in the US, though using uranium and plutonium as fuel) it is still a next generation nuclear technology – theoretical. China did announce this year that it intended to develop a thorium MSR, but nuclear radiologist Peter Karamoskos, of the International Campaign to Abolish Nuclear Weapons (ICAN), says the world shouldn't hold its breath. 'Without exception, [thorium reactors] have never been commercially viable, nor do any of the intended new designs even remotely seem to be viable. Like all nuclear power production they rely on extensive taxpayer subsidies; the only difference is that with thorium and other breeder reactors these are of an order of magnitude greater, which is why no government has ever continued their funding.' China's development will persist until it experiences the ongoing major technical hurdles the rest of the nuclear club have discovered, he says. Others see thorium as a smokescreen to perpetuate the status quo: the world's only operating thorium reactor – India's Kakrapar-1 – is actually a converted PWR, for example. 'This could be seen to excuse the continued use of PWRs until thorium is [widely] available,' points out Peter Rowberry of No Money for Nuclear (NM4N) and Communities Against Nuclear Expansion (CANE). In his reading, thorium is merely a way of deflecting attention and criticism from the dangers of the uranium fuel cycle and excusing the pumping of more money into the industry. And yet the nuclear industry itself is also sceptical, with none of the big players backing what should be – in PR terms and in a post-Fukushima world – its radioactive holy grail: safe reactors producing more energy for less and cheaper fuel. In fact, a 2010 National Nuclear Laboratory (NNL) report (PDF)concluded the thorium fuel cycle 'does not currently have a role to play in the UK context [and] is likely to have only a limited role internationally for some years ahead' – in short, it concluded, the claims for thorium were 'overstated'. Proponents counter that the NNL paper fails to address the question of MSR technology, evidence of its bias towards an industry wedded to PWRs. Reliant on diverse uranium/plutonium revenue streams – fuel packages and fuel reprocessing, for example – the nuclear energy giants will never give thorium a fair hearing, they say. But even were its commercial viability established, given 2010's soaring greenhouse gas levels, thorium is one magic bullet that is years off target. Those who support renewables say they will have come so far in cost and efficiency terms by the time the technology is perfected and upscaled that thorium reactors will already be uneconomic. Indeed, if renewables had a fraction of nuclear's current subsidies they could already be light years ahead. All other issues aside, thorium is still nuclear energy, say environmentalists, its reactors disgorging the same toxic byproducts and fissile waste with the same millennial half-lives. Oliver Tickell, author of Kyoto2, says the fission materials produced from thorium are of a different spectrum to those from uranium-235, but 'include many dangerous-to-health alpha and beta emitters'. Tickell says thorium reactors would not reduce the volume of waste from uranium reactors. 'It will create a whole new volume of radioactive waste from previously radio-inert thorium, on top of the waste from uranium reactors. Looked at in these terms, it's a way of multiplying the volume of radioactive waste humanity can create several times over.' Putative waste benefits – such as the impressive claims made by former Nasa scientist Kirk Sorensen, one of thorium's staunchest advocates – have the potential to be outweighed by a proliferating number of MSRs. There are already 442 traditional reactors already in operation globally, according to the International Atomic Energy Agency. The by-products of thousands of smaller, ostensibly less wasteful reactors would soon add up. Anti-nuclear campaigner Peter Karamoskos goes further, dismissing a 'dishonest fantasy' perpetuated by the pro-nuclear lobby. Thorium cannot in itself power a reactor; unlike natural uranium, it does not contain enough fissile material to initiate a nuclear chain reaction. As a result it must first be bombarded with neutrons to produce the highly radioactive isotope uranium-233 – 'so these are really U-233 reactors,' says Karamoskos. This isotope is more hazardous than the U-235 used in conventional reactors, he adds, because it produces U-232 as a side effect (half life: 160,000 years), on top of familiar fission by-products such as technetium-99 (half life: up to 300,000 years) and iodine-129 (half life: 15.7 million years).Add in actinides such as protactinium-231 (half life: 33,000 years) and it soon becomes apparent that thorium's superficial cleanliness will still depend on digging some pretty deep holes to bury the highly radioactive waste. With billions of pounds already spent on nuclear research, reactor construction and decommissioning costs – dwarfing commitments to renewables – and proposed reform of the UK electricity markets apparently hiding subsidies to the nuclear industry, the thorium dream is considered by many to be a dangerous diversion. Energy consultant and former Friends of the Earth anti-nuclear campaigner Neil Crumpton says the government would be better deferring all decisions about its new nuclear building plans and fuel reprocessing until the early 2020s: 'By that time much more will be known about Generation IV technologies including LFTRs and their waste-consuming capability.' In the meantime, says Jean McSorley, senior consultant for Greenpeace's nuclear campaign, the pressing issue is to reduce energy demand and implement a major renewables programme in the UK and internationally – after all, even conventional nuclear reactors will not deliver what the world needs in terms of safe, affordable electricity, let alone a whole raft of new ones. 'Even if thorium technology does progress to the point where it might be commercially viable, it will face the same problems as conventional nuclear: it is not renewable or sustainable and cannot effectively connect to smart grids. The technology is not tried and tested, and none of the main players is interested. Thorium reactors are no more than a distraction.'

No investors - laundry list

Tickell 12

Oliver Tickell, As a student of physics at St John's College, Oxford, Tickell holds a masters degree from Oxford University. He is a founding partner of Oxford Climate Associates and a member of the Oxford Geoengineering Institute, April/May 2012, "Thorium: Not ‘green’, not ‘viable’, and not likely", http://www.jonathonporritt.com/sites/default/files/users/Thorium%20briefing%20FINAL%203.7.12.pdf

4.3 Thorium and LFTRs – investment outlook The development of thorium / LFTR technologies represents a poor investment for national governments, utilities and private investors given:  the marginal benefits to be derived from using thorium fuels in existing reactor designs;  the very long-term nature of any benefit that may be realised from LFTRs, of the order of half a century;  the uncertainty as to whether the very significant technical challenges of the LFTR will ever be overcome;  the possibility that the materials used for reactor construction may degrade more rapidly than anticipated, causing early shut-down;  the likely very high cost of LFTR electricity – especially when compared against the anticipated low future cost of electricity from renewable sources, solar in particular, over the applicable time frame.

## prolif

#### No widespread proliferation

Hymans 12

Jacques Hymans, USC Associate Professor of IR, 4/16/12, North Korea's Lessons for (Not) Building an Atomic Bomb, www.foreignaffairs.com/articles/137408/jacques-e-c-hymans/north-koreas-lessons-for-not-building-an-atomic-bomb?page=show

Washington's miscalculation is not just a product of the difficulties of seeing inside the Hermit Kingdom. It is also a result of the broader tendency to overestimate the pace of global proliferation. For decades, Very Serious People have predicted that strategic weapons are about to spread to every corner of the earth. **Such warnings have routinely proved wrong** - for instance, the intelligence assessments that led to the 2003 invasion of Iraq - but they continue to be issued. In reality, despite the diffusion of the relevant technology and the knowledge for building nuclear weapons, the world has been experiencing a great proliferation slowdown. Nuclear weapons programs around the world are taking much longer to get off the ground - and their failure rate is much higher - than they did during the first 25 years of the nuclear age.

As I explain in my article "Botching the Bomb" in the upcoming issue of Foreign Affairs, the key reason for the great proliferation slowdown is the absence of strong cultures of scientific professionalism in most of the recent crop of would-be nuclear states, which in turn is a consequence of their poorly built political institutions. In such dysfunctional states, the quality of technical workmanship is low, there is little coordination across different technical teams, and technical mistakes lead not to productive learning but instead to finger-pointing and recrimination. **These problems are debilitating**, and **they cannot be fixed** simply by bringing in more imported parts through illicit supply networks. In short, as a struggling proliferator, North Korea has a lot of company.

#### No domino theory—nonproliferation has zero utility

Potter 8

William C. Potter is Sam Nunn and Richard Lugar Professor of Nonproliferation Studies and Director of the James Martin Center for Nonproliferation Studies at the Monterey Institute of International Studies, Summer 2008, Divining Nuclear Intentions, http://muse.jhu.edu/journals/international\_security/v033/33.1.potter.pdf

Hymans is keenly aware of the deficiency of past proliferation projections, which he attributes in large part to the “tendency to use the growth of nuclear capabilities, stances toward the non-proliferation regime, and a general ‘roguishness’ of the state as proxies for nuclear weapons intentions” (p. 217). Such intentions, he believes, cannot be discerned without reference to leadership national identity conceptions, a focus that appears to have been absent to date in intelligence analyses devoted to forecasting proliferation.49

Hymans is equally critical of the popular notion that “the ‘domino theory’ of the twenty-first century may well be nuclear.”50 As he points out, **the new domino theory, like its discredited Cold War predecessor, assumes an oversimplified view about why and how decisions to acquire nuclear weapons are taken**.51 **Leaders’ nuclear preferences**, he maintains, “**are not** highly **contingent on what other states decide**,” and, therefore, “**proliferation tomorrow will** probably **remain as rare as proliferation today, with no single instance of proliferation causing a cascade of nuclear weapons states**” (p. 225). In addition, he argues, the domino thesis embraces “an exceedingly dark picture of world trends by lumping the truly dangerous leaders together with the merely self assertive ones,” and equating interest in nuclear technology with weapons intent (pp. 208209). Dire proliferation forecasts, both past and present, Hymans believes, flow from four myths regarding nuclear decisonmaking: (1) states want the bomb as a deterrent; (2) states seek the bomb as a “ticket to international status”; (3) states go for the bomb because of the interests of domestic groups; and (4) the international regime protects the world from a flood of new nuclear weapons states (pp. 208216). Each of these assumptions is faulty, Hymans contends, because of its fundamental neglect of the decisive role played by individual leaders in nuclear matters.

As discussed earlier, Hymans argues that the need for a nuclear deterrent is entirely in the eye of the beholder—a leader with an oppositional nationalist NIC. By the same token, just because some leaders seek to achieve interna tional prestige through acquisition of the bomb, it does not mean that other leaders “necessarily view the bomb as the right ticket to punch”: witness the case of several decades of Argentine leaders, as well as the Indian Nehruvians (pp. 211212). The case of Egypt under Anwar al-Sadat, though not discussed by Hymans, also seems to at this category.

Hymans’s focus on the individual level of analysis leads him to discount bu reaucratic political explanations for nuclear postures, as well. Central to his argument is the assumption that decisions to acquire nuclear weapons are taken “without the considerable vetting that political scientists typically assume precedes most important states choices” (p. 13). As such, although he is prepared to credit nuclear energy bureaucracies as playing a supporting role in the ef forts by Australia, France, and India to go nuclear, he does not observe their influence to be a determining factor in root nuclear decisions by national lead ers. Moreover, contrary to a central premise of Solingen’s model of domestic political survival, Hymans ands little evidence in his case studies of leaders pursuing nuclear weapons to advance their political interests (p. 213). For ex ample, he argues, the 1998 nuclear tests in India were as risky domestically for Vajpayee as they were internationally (p. 214).

Most provocatively, Hymans invokes an individual-centric mode of **analysis** to **challenge** **the necessity and utility of a strong international nonproliferation regime**. As discussed in a preceding section, **he finds no evidence that the NPT regime prevented any** of the **leaders who desired nuclear weapons from pursuing them**.

#### No impact – every actor has incentives to overstate consequences

**Farley 11**, assistant professor at the Patterson School of Diplomacy and International Commerce at the University of Kentucky, (Robert, "Over the Horizon: Iran and the Nuclear Paradox," 11-16, [www.worldpoliticsreview.com/articles/10679/over-the-horizon-iran-and-the-nuclear-paradox](http://www.worldpoliticsreview.com/articles/10679/over-the-horizon-iran-and-the-nuclear-paradox))

But states and policymakers habitually overestimate the impact of nuclear weapons. This happens among both proliferators and anti-proliferators. Would-be proliferators seem to expect that possessing a nuclear weapon will confer “a seat at the table” as well as solve a host of minor and major foreign policy problems. Existing nuclear powers fear that new entrants will act unpredictably, destabilize regions and throw existing diplomatic arrangements into flux. These predictions almost invariably turn out wrong; nuclear weapons consistently fail to undo the existing power relationships of the international system.

The North Korean example is instructive. In spite of the dire warnings about the dangers of a North Korean nuclear weapon, the region has weathered Pyongyang’s nuclear proliferation in altogether sound fashion. Though some might argue that nukes have “enabled” North Korea to engage in a variety of bad behaviors, that was already the case prior to its nuclear test. The crucial deterrent to U.S. or South Korean action continues to be North Korea’s conventional capabilities, as well as the incalculable costs of governing North Korea after a war. Moreover, despite the usual dire predictions of nonproliferation professionals, the North Korean nuclear program has yet to inspire Tokyo or Seoul to follow suit. The DPRK’s program represents a tremendous waste of resources and human capital for a poor state, and it may prove a problem if North Korea endures a messy collapse. Thus far, however, the effects of the arsenal have been minimal.

Israel represents another case in which the benefits of nuclear weapons remain unclear. Although Israel adopted a policy of ambiguity about its nuclear program, most in the region understood that Israel possessed nuclear weapons by the late-1960s. These weapons did not deter Syria or Egypt from launching a large-scale conventional assault in 1973, however. Nor did they help the Israeli Defense Force compel acquiescence in Lebanon in 1982 or 2006. Nuclear weapons have not resolved the Palestinian question, and when it came to removing the Saddam Hussein regime in Iraq, Israel relied not on its nuclear arsenal but on the United States to do so -- through conventional means -- in 2003. Israeli nukes have thus far failed to intimidate the Iranians into freezing their nuclear program. Moreover, Israel has pursued a defense policy designed around the goal of maintaining superiority at every level of military escalation, from asymmetrical anti-terror efforts to high-intensity conventional combat. Thus, it is unclear whether the nuclear program has even saved Israel any money.

The problem with nukes is that there are strong material and normative pressures against their use, not least because states that use nukes risk incurring nuclear retaliation. Part of the appeal of nuclear weapons is their bluntness, but for foreign policy objectives requiring a scalpel rather than a sledgehammer, they are useless. As a result, states with nuclear neighbors quickly find that they can engage in all manner of harassment and escalation without risking nuclear retaliation. The weapons themselves are often more expensive than the foreign policy objectives that they would be used to attain. Moreover, normative pressures do matter. Even “outlaw” nations recognize that the world views the use of nuclear -- not to mention chemical or biological -- weapons differently than other expressions of force. And almost without exception, even outlaw nations require the goodwill of at least some segments of the international community.

Given all this, it is not at all surprising that many countries eschew nuclear programs, even when they could easily attain nuclear status. Setting aside the legal problems, nuclear programs tend to be expensive, and they provide relatively little in terms of foreign policy return on investment. Brazil, for example, does not need nuclear weapons to exercise influence in Latin America or deter its rivals. Turkey, like Germany, Japan and South Korea, decided a long time ago that the nuclear “problem” could be solved most efficiently through alignment with an existing nuclear power.

Why do policymakers, analysts and journalists so consistently overrate the importance of nuclear weapons? The answer is that everyone has a strong incentive to lie about their importance. The Iranians will lie to the world about the extent of their program and to their people about the fruits of going nuclear. The various U.S. client states in the region will lie to Washington about how terrified they are of a nuclear Iran, warning of the need for “strategic re-evaluation,” while also using the Iranian menace as an excuse for brutality against their own populations. Nonproliferation advocates will lie about the terrors of unrestrained proliferation because they do not want anyone to shift focus to the manageability of a post-nuclear Iran. The United States will lie to everyone in order to reassure its clients and maintain the cohesion of the anti-Iran block.

None of these lies are particularly dishonorable; they represent the normal course of diplomacy. But they are lies nevertheless, and serious analysts of foreign policy and international relations need to be wary of them.

Nonproliferation is a good idea, if only because states should not waste tremendous resources on weapons of limited utility. Nuclear weapons also represent a genuine risk of accidents, especially for states that have not yet developed appropriately robust security precautions. Instability and collapse in nuclear states has been harrowing in the past and will undoubtedly be harrowing in the future. All of these threats should be taken seriously by policymakers. Unfortunately, as long as deception remains the rule in the practice of nuclear diplomacy, exaggerated alarmism will substitute for a realistic appraisal of the policy landscape.

#### US won’t exert nonproliferation leadership

Cleary 12

Richard Cleary, American Enterprise Institute Research Assistant, 8/13/12, Richard Cleary: Persuading Countries to Forgo Nuclear Fuel-Making, npolicy.org/article.php?aid=1192&tid=30

The cases above offer a common lesson: The U.S., though constrained or empowered by circumstance, can exert considerable sway in nonproliferation matters, **but** often **elects not to apply the most powerful tools at its disposal for fear of jeopardizing other objectives**. The persistent dilemma of how much to emphasize nonproliferation goals, and at what cost, has contributed to cases of **nonproliferation failure**. The inconsistent or incomplete application of U.S. power in nonproliferation cases is most harmful when it gives the impression to a nation that either sharing sensitive technology or developing it is, or will become, acceptable to Washington. **U.S. reticence** historically, with some exceptions, **to prioritize nonproliferation**—and in so doing reduce the chance of success in these cases—**does not leave room for** great **optimism about future U.S. efforts at persuading countries to forgo nuclear fuel-making**.

#### Nuclear energy cred fails—countries say no to US tech if it constrains them

Cleary 12

Richard Cleary, American Enterprise Institute Research Assistant, 8/13/12, Richard Cleary: Persuading Countries to Forgo Nuclear Fuel-Making, npolicy.org/article.php?aid=1192&tid=30

The examples above show the limitations of both demand and supply side efforts. Supply side diplomatic interventions, made before the transfer of technology, have been at times effective, particularly in precluding nuclear fuel-making in the short term and buying time for more lasting solutions. However, as the Pakistan and Brazil cases illustrated, supply side interventions are no substitute for demand side solutions: **Countries face political choices regarding nuclear fuel-making**. **A nation set upon an independent fuel-making capacity**, such as Pakistan or Brazil, **is unlikely to give up efforts because of supply side controls**. Multilateral fuel-making arrangements, as proposed repeatedly by the United States, have not materialized and therefore seem to have had little tangible influence.

#### US leadership on prolif-resistant nuclear energy cooperation fails, causes backlash that undermines nonproliferation

Hibbs 12

Mark Hibbs, Carnegie Nuclear Policy Program Senior Associate, 8/7/12, Negotiating Nuclear Cooperation Agreements, carnegieendowment.org/2012/08/07/negotiating-nuclear-cooperation-agreements/d98z

**U.S. resolve to include a no-ENR pledge in the body of new bilateral agreements will be seen** by some countries **as arrogant and unacceptable**. Incorporating ENR terms into side-letters or preambles may be less offensive. That approach would also more easily facilitate including reciprocal commitments by the United States into its 123 bargains with foreign countries. These might include guaranteeing nuclear fuel supply through participation in the U.S. fuel bank, facilitating the country’s access to other back-up sources of nuclear fuel, and, in the future, perhaps even taking back U.S.-origin spent fuel.

The outcome of any negotiation for a bilateral nuclear cooperation agreement will depend on the leverage both sides bring to the table. When the United States negotiated most of the 22 such agreements in force today, it was the world’s leading provider of nuclear technology, equipment, and fuel. As the examples of Jordan and Vietnam show, unlike half a century ago, nuclear newcomers today don’t need to buy American.

The vendor field is populated by firms in Argentina, Australia, Canada, the European Union, Japan, Kazakhstan, Namibia, Niger, Russia, and South Korea, and in the future they will be joined by others in China and India. Governments in these countries do not seek to establish a no-ENR requirement as a condition for foreign nuclear cooperation. Some of them, Australia and Canada for example, have strong nonproliferation track records. **Countries** now **seeking** to form **foreign industrial partnerships to set up nuclear power** programs **have numerous options and they will favor arrangements that provide them the most freedom and flexibility**.

**Equity in international nuclear affairs matters**. By negotiating with its partners voluntary political agreements, including side benefits to limit the application of sensitive technologies, instead of trying to legally **compel** them to make **concessions that are politically onerous, the U**nited **S**tates **can** serve its nonproliferation and security interests while **avoid**ing the **challenge to U.S. credibility** that would follow from rigid application of a one-size-fits-all policy.

The United States should show nonproliferation leadership by generally discouraging countries without enrichment and reprocessing capabilities from embarking in this direction. But negotiators need policy guidelines that provide for flexibility and encourage them to create incentives to get desired results. To some extent, the current policy may be informed by the insight that trying to negotiate no-ENR terms into the operative text of an agreement may fail, and that other approaches may be more productive. It also reflects the reality that U.S. leverage on nuclear trade is declining.

#### Maintaining trade through weak nuclear agreements solves prolif—shift to restrictive agreements scuttles everything

NEI 12

Nuclear Energy Institute, May 2012, Issues in Focus: Nuclear Energy Exports and Nonproliferation, www.nei.org/resourcesandstats/documentlibrary/newplants/whitepaper/issues-in-focus-nuclear-energy-exports-and-nonproliferation

These imperatives are inextricably linked. To maintain U.S. influence over global nonproliferation policy and international nuclear safety, the U.S. commercial nuclear energy sector must participate in the rapidly expanding global market for nuclear energy technologies (439 commercial nuclear reactors in operation around the world, 65 under construction, 162 planned or on order).

Without U.S. commercial engagement, the United States would have substantially diminished influence over other nations’ nonproliferation policies and practices. U.S. technology and U.S. industry are a critical engine that drives U.S. nonproliferation policies. A successful nuclear trade and export policy must be a partnership between government and industry.

A Section 123 Agreement is a prerequisite for U.S. commercial nuclear exports. It is also promotes U.S. nonproliferation interests. Section 123 Agreements already include provisions governing enrichment and reprocessing of U.S.- controlled nuclear material, including a prohibition on enrichment or reprocessing **without prior U.S. consent**. **Any effort** in U.S. 123 agreements **to impose additional restrictions on enrichment and/or reprocessing** of nuclear material controlled by other **countries is seen by** many **countries as an overreach by the U**nited **S**tates.

It would be counterproductive to require other nations to forswear enrichment and reprocessing in order to execute a Section 123 agreement with the United States. Most **nations would refuse to do so, and would simply turn to other commercial nuclear suppliers** – France, Russia and others that do not impose such requirements. **Without a Section 123 agreement, the U**nited **S**tates **cannot engage in commercial nuclear trade**, and thus has substantially diminished influence over nonproliferation.

Unilateral requirements, imposed in the name of nonproliferation, could have the **perverse effect of undermining U.S. influence over nonproliferation policy**.

#### Kills the Vietnam agreement

NEI 12

Nuclear Energy Institute, June 2012, H.R. 1280:

A Misguided Attempt to Control Enrichment and Reprocessing Technologies, http://www.nei.org/resourcesandstats/documentlibrary/newplants/whitepaper/white-paper--hr-1280-a-misguided-attempt-to-control-enrichment-and-reprocessing-technologies

The H.R. 1280 report states that there is “no evidence to support the concern” that U.S. suppliers would be disadvantaged by the requirement for countries to forswear E&R as a condition for U.S. nuclear cooperation. But the cases of Vietnam and Jordan suggest otherwise: **it is not clear** that these **states will accept** the same **restrictions** found in the U.S.-UAE agreement. With negotiations for U.S. cooperation long stalled over E&R concerns, both countries’ nuclear energy programs have moved ahead in partnership with non-U.S. suppliers.

Unlike UAE, Jordan possesses sizeable uranium reserves—around 200,000 tons—and has expressed an interest in eventually enriching fuel for export to international mar kets. And while Jordan had reportedly considered some E&R limits in 2011 negotiations with the U.S., Dr. Khaled Toukan, head of the Jordanian Atomic Energy Commission, has now publicly stated opposition to “restrictions outside of the NPT on a regional basis or a country-by-country basis.”6 He has also criticized the UAE commitment, saying that country “has relinquished all of its NPT rights to sensitive nuclear technology indefinitely. Why should we give up our rights?”7

It is unclear whether Jordan will ultimately accept E&R restrictions in exchange for a U.S. nuclear cooperation agreement; but the country is clearly not waiting for such cooperation to move ahead with its civil nuclear aspirations. Jordan has nearly finished the technology selection process for its first nuclear power plant, a 1,000-megawatt reactor due in service in 2019. A Japanese-French consortium, as well as Russian and Canadian groups, are seeking to win that bid, while South Korea has loaned Jordan $70 million to help fund a 5- megawatt nuclear research reactor worth $130 million. Meanwhile, Jordan has granted France's AREVA exclusive rights over the next 25 years to mine uranium in the country’s central region.

Although Vietnam has indicated that it has no plans to develop E&R capabilities, **sources close to its negotiations with the U.S. say Vietnam has** so far **chosen not to renounce E&R rights** in exchange for a U.S. nuclear agreement. As with Jordan, **Vietnam has sought alternatives** to U.S. cooperation, including a $5.6- billion deal with Russia in late 2010 to build two 1,000-MW VVER reactors. Russia will also supply the fuel for the reactors and handle its removal and reprocessing. In 2011, Vietnam concluded a separate reactor deal with Japan for the supply of two additional reactors.

#### 123 agreement key to strategic cooperation—key to check China flare-ups in the South China Seas

Jha 10

Saurav Jha, The Diplomat and World Politics Review Contibutor, 9/15/10, Why a US-Vietnam Nuclear Deal?, thediplomat.com/2010/09/15/why-a-us-vietnam-nuclear-deal/?all=true

But the engagement with Vietnam that the visit also demonstrated goes deeper than just this show of force—**Washington is looking to move beyond symbolism to engage in a genuine strategic partnership**, **the cornerstone** of which **will be the US-Vietnam 123 nuclear cooperation agreement**.

Unsurprisingly, the deal has already riled China and non-proliferation proponents alike, who note that the deal being offered to Vietnam is devoid of the standard strings that have characterised other deals with emerging nuclear nations, including the United Arab Emirates.

Most notably, Vietnam won’t have to abandon having the option to carry out nuclear fuel cycle activities on its territory as the UAE had to. This means that Vietnam, can, at least hypothetically, establish enrichment and reprocessing (ENR) facilities in its territory. Of course, the agreement doesn’t mean that the United States is about to transfer any ENR technology to Vietnam—or that the latter is in any hurry to set up its own such facilities. As Vuong Huu Tan, president of the government-affiliated Vietnam Atomic Energy Institute, has noted: ‘Vietnam doesn’t intend to enrich as of now because of expensive and very sensitive technology.’

ENR technology is anyway a closely guarded secret that only a handful of countries have the capacity to exploit on an industrial scale. But while any country with a nuclear energy programme would typically like to retain a certain degree of independence—and the NPT actually entitles all of its members to engage in full nuclear co-operation—the reality for many is that commercial and proliferation sensitivities have prompted various restrictions and regimes to be put in place denying them any such technology. In addition, such activities are simply prohibitively expensive for small and mid-sized nuclear estates.

Yet while the UAE’s willingness to forsake fuel cycle activity on its own soil seemed to provide a gold standard Washington could use for its nuclear dealings, the nature of the Vietnam deal implies that a broader technological relationship could yet be crafted between Hanoi and Washington.

With its industrial activity in the north of the country expanding rapidly, Vietnam has been prompted to explore nuclear power as a ‘clean’ way of meeting its growing electricity demands. But a 123 agreement with the United States is unlikely to stop at nuclear co-operation. As US Secretary of State, Hillary Clinton, said during her visit to Hanoi in July, ‘**Ties between the two countries will be taken to the next level**.’

What could this mean? Certainly US firms can be expected to play an increasing role in Vietnam’s industrial development, something that would likely necessitate a much broader deal than Washington has arranged with other countries.

For example, a number of instrumentation technologies are classified as dual use by the US State Department, but will be required if Hanoi wishes to exploit its offshore hydrocarbon resources. Unlike in the Middle East, US oil majors aren’t already entrenched in Vietnam’s fossil fuel sector, and an excessively restrictive deal would adversely affect their ability to compete.

Such differences mean that the Vietnam arrangement is more akin to the India nuclear deal than the one with the UAE, a point no more evident than at the strategic level. Indeed, although it’s on a quite different scale, the philosophy and rationale underpinning a US-Vietnam 123 are remarkably similar to the Indo-US nuclear deal.

So why is the United States so interested in making an India-like exception to its nuclear arrangements with Vietnam? China.

As another wary neighbour of China, **Vietnam is a** potentially sympathetic **US partner in** any **attempts to keep expansionist Chinese ambitions in the S**outh **C**hina **S**ea **in check**. With a long maritime tradition and a knack for military upsets (the Vietnamese have managed to defeat the French, Americans and Chinese on different occasions), combined with its very sizeable armed forces, Vietnam is potentially **an indispensable ally** **in any** possible **regional flare-up**.

#### Extinction

Wittner 11 (Lawrence S. Wittner, Emeritus Professor of History at the State University of New York/Albany, Wittner is the author of eight books, the editor or co-editor of another four, and the author of over 250 published articles and book reviews. From 1984 to 1987, he edited Peace & Change, a journal of peace research., 11/28/2011, "Is a Nuclear War With China Possible?", [www.huntingtonnews.net/14446](http://www.huntingtonnews.net/14446))

While nuclear weapons exist, there remains a danger that they will be used. After all, for centuries national conflicts have led to wars, with nations employing their deadliest weapons. The current deterioration of U.S. relations with China might end up providing us with yet another example of this phenomenon.

The gathering tension between the United States and China is clear enough. Disturbed by China’s growing economic and military strength, the U.S. government recently challenged China’s claims in the South China Sea, increased the U.S. military presence in Australia, and deepened U.S. military ties with other nations in the Pacific region. According to Secretary of State Hillary Clinton, the United States was “asserting our own position as a Pacific power.”

But need this lead to nuclear war?

Not necessarily. And yet, there are signs that it could. After all, both the United States and China possess large numbers of nuclear weapons. The U.S. government threatened to attack China with nuclear weapons during the Korean War and, later, during the conflict over the future of China’s offshore islands, Quemoy and Matsu. In the midst of the latter confrontation, President Dwight Eisenhower declared publicly, and chillingly, that U.S. nuclear weapons would “be used just exactly as you would use a bullet or anything else.”

Of course, China didn’t have nuclear weapons then. Now that it does, perhaps the behavior of national leaders will be more temperate. But the loose nuclear threats of U.S. and Soviet government officials during the Cold War, when both nations had vast nuclear arsenals, should convince us that, even as the military ante is raised, nuclear saber-rattling persists.

Some pundits argue that nuclear weapons prevent wars between nuclear-armed nations; and, admittedly, there haven’t been very many—at least not yet. But the Kargil War of 1999, between nuclear-armed India and nuclear-armed Pakistan, should convince us that such wars can occur. Indeed, in that case, the conflict almost slipped into a nuclear war. Pakistan’s foreign secretary threatened that, if the war escalated, his country felt free to use “any weapon” in its arsenal. During the conflict, Pakistan did move nuclear weapons toward its border, while India, it is claimed, readied its own nuclear missiles for an attack on Pakistan.

At the least, though, don’t nuclear weapons deter a nuclear attack? Do they? Obviously, NATO leaders didn’t feel deterred, for, throughout the Cold War, NATO’s strategy was to respond to a Soviet conventional military attack on Western Europe by launching a Western nuclear attack on the nuclear-armed Soviet Union. Furthermore, if U.S. government officials really believed that nuclear deterrence worked, they would not have resorted to championing “Star Wars” and its modern variant, national missile defense. Why are these vastly expensive—and probably unworkable—military defense systems needed if other nuclear powers are deterred from attacking by U.S. nuclear might?

Of course, the bottom line for those Americans convinced that nuclear weapons safeguard them from a Chinese nuclear attack might be that the U.S. nuclear arsenal is far greater than its Chinese counterpart. Today, it is estimated that the U.S. government possesses over five thousand nuclear warheads, while the Chinese government has a total inventory of roughly three hundred. Moreover, only about forty of these Chinese nuclear weapons can reach the United States. Surely the United States would “win” any nuclear war with China.

But what would that “victory” entail? A nuclear attack by China would immediately slaughter at least 10 million Americans in a great storm of blast and fire, while leaving many more dying horribly of sickness and radiation poisoning. The Chinese death toll in a nuclear war would be far higher. Both nations would be reduced to smoldering, radioactive wastelands. Also, radioactive debris sent aloft by the nuclear explosions would blot out the sun and bring on a “nuclear winter” around the globe—destroying agriculture, creating worldwide famine, and generating chaos and destruction.

Moreover, in another decade the extent of this catastrophe would be far worse. The Chinese government is currently expanding its nuclear arsenal, and by the year 2020 it is expected to more than double its number of nuclear weapons that can hit the United States. The U.S. government, in turn, has plans to spend hundreds of billions of dollars “modernizing” its nuclear weapons and nuclear production facilities over the next decade.

To avert the enormous disaster of a U.S.-China nuclear war, there are two obvious actions that can be taken. The first is to get rid of nuclear weapons, as the nuclear powers have agreed to do but thus far have resisted doing. The second, conducted while the nuclear disarmament process is occurring, is to improve U.S.-China relations. If the American and Chinese people are interested in ensuring their survival and that of the world, they should be working to encourage these policies.

## china

#### Thorium doesn’t lock out US—being developed collaboratively

Mark Halper, Smart Planet, 6/26/12, U.S. partners with China on new nuclear, www.smartplanet.com/blog/intelligent-energy/us-partners-with-china-on-new-nuclear/17037

The U.S. Department of Energy is quietly collaborating with China on an alternative nuclear power design known as a molten salt reactor that could run on thorium fuel rather than on more hazardous uranium, SmartPlanet understands.

DOE’s assistant secretary for nuclear energy Peter Lyons is co-chairing the partnership’s executive committee, along with Jiang Mianheng from the Chinese Academy of Sciences (CAS), according to a March presentation by CAS on thorium molten salt reactors. Beijing-based CAS is a state group overseeing about 100 research institutes. It and the DOE have established what CAS calls the “CAS and DOE Nuclear Energy Cooperation Memorandum of Understanding.”

#### If they wanted to, that’s inevitable—rare earth metal dominance

Mark Halper, Smart Planet, 6/26/12, U.S. partners with China on new nuclear, www.smartplanet.com/blog/intelligent-energy/us-partners-with-china-on-new-nuclear/17037

One reason for China’s interest in thorium: It has an ample supply of the substance, which occurs in monazite, a mineral that also contains rare earths, the metals that are vital across industries ranging from missiles to wind turbines to iPods. China, which dominates the world’s rare earth market, is believed to be sitting on substantial stockpiles of thorium that it has already extracted from the rare earths that it has mined and processed.

#### Thorium not key--US nuclear tech leadership inevitable

BPC 12

Bipartisan Policy Center’s Nuclear Initiative, Co-chaired by Senator Pete Domenici and Dr. Warren F. “Pete” Miller, July 2012, Maintaining U.S. Leadership in Global Nuclear Energy Markets, http://bipartisanpolicy.org/library/report/maintaining-us-leadership-global-nuclear-energy-markets

Nuclear power already plays an important role in the U.S. energy supply mix: The nation’s existing fleet of 104 reactors currently accounts for close to 20 percent of overall electricity production. In many parts of the country, nuclear plants help to assure grid stability and have been a major source of cost-effective, low-carbon base-load power for decades. The NRC, the industry’s chief regulatory overseer, is expected to approve extension of the operating licenses for most of these plants to 60 years while striving for improved safety and increasingly efficient operations. At present, the domestic nuclear industry is looking at limited opportunities for expansion in terms of increasing the number of U.S. plants. Currently, four new Generation III+ nuclear reactors have been licensed by the NRC and are under construction in the Southeast. In addition, the Tennessee Valley Authority has restarted construction activities at Watts Bar II.

Given this near-term expansion, the United States will continue to be a world leader in the development of advanced reactor technologies, including Generation III+ advanced passive reactors and SMRs. International interest in developing new nuclear-generating capacity, on the other hand, presents potentially substantial business opportunities for the domestic nuclear industry. Commercial nuclear exports generate obvious economic benefits for U.S. firms and for the nation’s overall balance of trade. Importantly, they also help the United States retain a major role in the evolution and maintenance of international nuclear safety and nonproliferation regimes. Other nations not only look to the U.S. industry for operational expertise, they see the NRC as setting the international gold standard for safety and physical security regulation. DOE’s National Nuclear Security Administration, meanwhile, has a great deal of influence over the nonproliferation aspects of international fuel-cycle issues.

No nuclear exports—bureaucracy and foreign government competition

NEI, Nuclear Energy Institute, Winter ‘12

(“U.S. Nuclear Export Rules Hurt Global Competitiveness,” <http://www.nei.org/resourcesandstats/publicationsandmedia/insight/insightwinter2012/us-nuclear-export-rules-hurt-global-competitiveness/>)

Today, U.S. dominance of the global nuclear power market has eroded as suppliers from other countries **compete aggressively against American exporters.** U.S. suppliers confront competitors that benefit from various forms of state promotion and also must contend with a U.S. government that has not adapted to new commercial realities. The potential is tremendous—$500 billion to $740 billion in international orders over the next decade, representing tens of thousands of potential American jobs, according to the U.S. Department of Commerce.

With America suffering a large trade deficit, nuclear goods and services represent a market worth aggressive action.

However, antiquated U.S. government approaches to nuclear exports are challenging U.S. competitiveness in the nuclear energy market. New federal support is needed if the United States wants to reclaim dominance in commercial nuclear goods and services—and create the jobs that go with them.

“The U.S. used to be a monopoly supplier of nuclear materials and technology back in the ’50s and ’60s,” said Fred McGoldrick, former director of the Office of Nonproliferation and Export Policy at the State Department. “That position has eroded to the point where we’re a minor player compared to other countries.”

America continues to lead the world in technology innovation and know-how. So what are the issues? And where is the trade?

Effective coordination among the many government agencies involved in nuclear exports would provide a boost to U.S. suppliers.

 “Multiple U.S. agencies are engaged with countries abroad that are developing nuclear power, from early assistance to export controls to trade finance and more,” said Ted Jones, director for supplier international relations at NEI. The challenge is to create a framework that allows commercial nuclear trade to grow while ensuring against the proliferation of nuclear materials.

 “To compete in such a situation, an ongoing dialogue between U.S. suppliers and government needs to be conducted and U.S. trade promotion **must be coordinated at the highest levels**,” Jones said.

Licensing U.S. Exports

Jurisdiction for commercial nuclear export controls is divided among the Departments of Energy and Commerce and the Nuclear Regulatory Commission and has not been comprehensively updated to coordinate among the agencies or to reflect economic and technological changes over the decades. The State Department also is involved in international nuclear commerce. It negotiates and implements so-called “123 agreements” that allow for nuclear goods and services to be traded with a foreign country.

The federal agencies often have different, conflicting priorities, leading to a lack of clarity for exporters and longer processing times for export licenses.

“The U.S. nuclear export regime is the **most complex and restrictive in the world** and the least efficient,” said Jones. “Furthermore, it is poorly focused on items and technologies that pose little or no proliferation concern. By trying to protect too much, we risk diminishing the focus on sensitive technologies and handicapping U.S. exports.”

A case in point is the Energy Department’s Part 810 regulations. While 123 agreements open trade between the United States and other countries, Part 810 regulates what the United States can trade with another country. For certain countries, **it can take more than a year to obtain “specific authorizations”** to export nuclear items. Because other supplier countries authorize exports to the same countries with fewer requirements and delays, the Part 810 rules translate into a significant competitive disadvantage for U.S. suppliers.

Today, 76 countries require a specific authorization, but DOE has proposed almost doubling that number—to include for the first time countries that have never demonstrated a special proliferation concern, that are already part of the global nuclear supply chain, and that plan new nuclear infrastructure.

The proposed Part 810 rule would do nothing to reduce lengthy license processing times, said Jones. Other nuclear supplier countries impose strict guidelines on their licensing agencies for timely processing of applications. Equivalent licenses must be processed in fewer than nine months in France, fewer than 90 days in Japan and 15 days in South Korea.

One possible solution, said McGoldrick, would be to set similar deadlines for issuance of licenses. U.S. agencies “could have deadlines set forth in the new [Part 810] regulations, which would give the relevant government agencies specified times in which to act on a license. Time could be exceeded only under certain circumstances,” said McGoldrick.

Instituting Same Rules for Everyone

At stake is not just the nation’s manufacturing base, but thousands of jobs. In 2008, all exports supported more than 10 million jobs, according to “The Report to the President on the National Export Initiative.” One of the report’s recommendations was to expand opportunities for U.S. commercial nuclear exports.

#### Data disproves hegemony impacts

Fettweis, 11

Christopher J. Fettweis, Department of Political Science, Tulane University, 9/26/11, Free Riding or Restraint? Examining European Grand Strategy, Comparative Strategy, 30:316–332, EBSCO

It is perhaps worth noting that there is no evidence to support a direct relationship between the relative level of U.S. activism and international stability. In fact, the limited data we do have suggest the opposite may be true. During the 1990s, the United States cut back on its defense spending fairly substantially. By 1998, the United States was spending $100 billion less on defense in real terms than it had in 1990.51 To internationalists, defense hawks and believers in hegemonic stability, this irresponsible “peace dividend” endangered both national and global security. “No serious analyst of American military capabilities,” argued Kristol and Kagan, “doubts that the defense budget has been cut much too far to meet America’s responsibilities to itself and to world peace.”52 On the other hand, if the pacific trends were not based upon U.S. hegemony but a strengthening norm against interstate war, one would not have expected an increase in global instability and violence.

The verdict from the past two decades is fairly plain: The world grew more peaceful while the United States cut its forces. No state seemed to believe that its security was endangered by a less-capable United States military, or at least none took any action that would suggest such a belief. No militaries were enhanced to address power vacuums, no security dilemmas drove insecurity or arms races, and no regional balancing occurred once the stabilizing presence of the U.S. military was diminished. The rest of the world acted as if the threat of international war was not a pressing concern, despite the reduction in U.S. capabilities. Most of all, the United States and its allies were no less safe. The incidence and magnitude of global conflict declined while the United States cut its military spending under President Clinton, and kept declining as the Bush Administration ramped the spending back up. No complex statistical analysis should be necessary to reach the conclusion that the two are unrelated.

Military spending figures by themselves are insufficient to disprove a connection between overall U.S. actions and international stability. Once again, one could presumably argue that spending is not the only or even the best indication of hegemony, and that it is instead U.S. foreign political and security commitments that maintain stability. Since neither was significantly altered during this period, instability should not have been expected. Alternately, advocates of hegemonic stability could believe that relative rather than absolute spending is decisive in bringing peace. Although the United States cut back on its spending during the 1990s, its relative advantage never wavered.

However, even if it is true that either U.S. commitments or relative spending account for global pacific trends, then at the very least stability can evidently be maintained at drastically lower levels of both. In other words, even if one can be allowed to argue in the alternative for a moment and suppose that there is in fact a level of engagement below which the United States cannot drop without increasing international disorder, a rational grand strategist would still recommend cutting back on engagement and spending until that level is determined. Grand strategic decisions are never final; continual adjustments can and must be made as time goes on. Basic logic suggests that the United States ought to spend the minimum amount of its blood and treasure while seeking the maximum return on its investment. And if the current era of stability is as stable as many believe it to be, no increase in conflict would ever occur irrespective of U.S. spending, which would save untold trillions for an increasingly debt-ridden nation.

It is also perhaps worth noting that if opposite trends had unfolded, if other states had reacted to news of cuts in U.S. defense spending with more aggressive or insecure behavior, then internationalists would surely argue that their expectations had been fulfilled. If increases in conflict would have been interpreted as proof of the wisdom of internationalist strategies, then logical consistency demands that the lack thereof should at least pose a problem. As it stands, the only evidence we have regarding the likely systemic reaction to a more restrained United States suggests that the current peaceful trends are unrelated to U.S. military spending. Evidently the rest of the world can operate quite effectively without the presence of a global policeman. Those who think otherwise base their view on faith alone.

#### Competitiveness not key to heg

Brooks and Wohlforth, 8

[Stephen G. Brooks is Assistant Professor and William C. Wohlforth is Professor in the Department of Government at Dartmouth College, “World out of Balance, International Relations and the Challenge of American Primacy,” p. 32-35]

 American primacy is also rooted in the county's position as the world's leading technological power. The United States remains dominant globally in overall R&D investments, high-technology production, commercial innovation, and higher education (table 2.3). Despite the weight of this evidence, elite perceptions of U.S. power had shifted toward pessimism by the middle of the first decade of this century. As we noted in chapter 1, this was partly the result of an Iraq-induced doubt about the utility of material predominance, a doubt redolent of the post-Vietnam mood. In retrospect, many assessments of U.S. economic and technological prowess from the 1990s were overly optimistic; by the next decade important potential vulnerabilities were evident. In particular, chronically imbalanced domestic finances and accelerating public debt convinced some analysts that the United States once again confronted a competitiveness crisis.23 If concerns continue to mount, this will count as the fourth such crisis since 1945; the first three occurred during the 1950s (Sputnik), the 1970s (Vietnam and stagflation), and the 1980s (the Soviet threat and Japan's challenge). None of these crises, however, shifted the international system's structure: multipolarity did not return in the 1960s, 1970s, or early 1990s, and each scare over competitiveness ended with the American position of primacy retained or strengthened.24

Our review of the evidence of U.S. predominance is not meant to suggest that the United States lacks vulnerabilities or causes for concern. In fact, it confronts a number of significant vulnerabilities; of course, this is also true of the other major powers.25 The point is that adverse trends for the United States will not cause a polarity shift in the near future. If we take a long view of U.S. competitiveness and the prospects for relative declines in economic and technological dominance, one takeaway stands out: relative power shifts slowly. The United States has accounted for a quarter to a third of global output for over a century. No other economy will match its combination of wealth, size, technological capacity, and productivity in the foreseeable future (tables 2.2 and 2.3).

The depth, scale, and projected longevity of the U.S. lead in each critical dimension of power are noteworthy. But what truly distinguishes the current distribution of capabilities is American dominance in all of them simultaneously. The chief lesson of Kennedy's 500-year survey of leading powers is that nothing remotely similar ever occurred in the historical experience that informs modern international relations theory. The implication is both simple and underappreciated: the counterbalancing constraint is inoperative and will remain so until the distribution of capabilities changes fundamentally. The next section explains why.

## 2nc

## cp

Fahring, JD – U Texas School of Law, ‘11

(T.L., 41 Tex. Envtl. L.J. 279)

V. Potential Problems with the Combined Government Measures to Promote New Nuclear Construction In 2007, a developer filed with the NRC the first application for a new reactor in nearly thirty years. n263 To date, the NRC has received eighteen COL applications for twenty-eight reactors. n264 The NRC has granted four ESPs and four Standard Design Certifications. n265 Applicants have filed seventeen applications for a Standard Design Certification. n266 The DOE has another seven Standard Design Certifications under review. n267 This recent spate of licensing activity after so long a dry-spell arguably owes much to the measures the United States has taken as of late to promote new nuclear [\*303] development. To the extent that these applications have been filed, these measures have been a success. But this initial success does not necessarily ensure that new nuclear construction will take place: In announcing the new reactor license applications ... utilities have made clear that they are not committed to actually building the reactors, even if the licenses are approved. Large uncertainties about nuclear plant construction costs still remain ... All those problems helped cause the long cessation of U.S. reactor orders and will need to be addressed before financing for new multibillion-dollar nuclear power plants is likely to be obtained. n268 A number of obstacles, thus, still might stand in the way of new nuclear construction in the United States. A. Developers Have Not Followed the Ideal Sequence in the NRC's Streamlined Licensing Process First, developers have failed to follow the ideal steps of the NRC's streamlined licensing process. n269 NRC Commissioner Gregory Jaczko explains: The idea was that utilities could get a plant design completed and certified and a site reviewed first ... They could then submit an application that simply references an already certified design and an approved early site permit. But almost no one is following that ideal process. Instead, we are once again doing everything in parallel ... n270 Developers also are delaying review of their applications. n271 They have put four of the seventeen COL applications filed with the NRC on hold. n272 They also have yet to complete the seventeen applications for designs filed with the NRC and are continuing to revise the four designs under review. n273 A possible explanation for the problems with the streamlined licensing process is that much of 2005 EPACT provides incentives only for the first few developers to proceed with new nuclear construction. In particular, the production tax credits, as construed by the IRS, were available only for the first 6,000 megawatts of additional nameplate capacity filed through COL applications with the NRC. n274 All COL applications that the NRC has received were filed after IRS Notice 2006-40, which provided this guidance. n275 "The deadline for automatic eligibility for the tax credit appears to [have provided] a strong incentive for nuclear plant applicants to file with the NRC by [\*304] the end of 2008 ..." n276 Given this incentive, developers might have filed quickly and with incomplete information, in the process failing to follow the NRC's ideal streamlined licensing sequence. n277 These problems with the licensing process could be detrimental to continued nuclear development. Defects in the licensing process led to cost overruns in the 1970s and 1980s, which dissuaded developers from undertaking any new nuclear construction for nearly thirty years. n278 Continued problems would constitute an input cost uncertainty to developers who have not yet filed applications, which might cause them to further delay new construction. B. The Reduction in Reactor Licensing Hearing Formality Might Cause a Public Backlash Second, insofar as the NRC's reduction in nuclear licensing hearing formality limits public participation in the licensing process, it could lead to a public backlash. "Public involvement has two basic functions: it permits the raising of issues that will improve the safety of nuclear power plants, and it enhances the transparency and level of confidence and trust that the public can have in nuclear regulation and decision-making." n279 Measures that limit public participation in the nuclear licensing process undermine both of these functions. n280 As noted in the overview of the history of U.S. nuclear construction above, nuclear construction has always been extremely sensitive to changes in public opinion. In 2009, a majority of the American public favored nuclear power. n281 However, only a minority of the public favored new nuclear construction in the area in which they live. n282 After the nuclear crisis at the Fukushima Daiichi plant in Japan, U.S. public support for nuclear power fell sharply, with polls showing that many feared a major nuclear accident in this country. n283 Limiting public participation in the licensing process could decrease public support by undermining any trust that the public has in the regulatory system. This defect could lead to more litigation and a repeat of U.S. nuclear construction's nightmarish cost overruns of the 1970s and 1980s, thus increasing input cost uncertainty to developers. n284 [\*305] C. Costs for Nuclear Construction Still Might Rise Over Time Third, much of 2005 EPACT is animated by the belief that costs will be highest for the first few reactors to be built: as developers build subsequent units, costs will go down. n285 The history of U.S. nuclear development shows this assumption not necessarily to be the case. n286 Historically, costs of nuclear construction rose over time. Nothing indicates that the costs of nuclear construction will do otherwise now. n287 D. The Production Tax Credit Might Not Be Sufficient to Reduce Costs of Construction in a Reactor Series Fourth, even if conditions are such that costs will decrease over time, the production tax credits in 2005 EPACT might not be sufficient to reduce costs in a reactor series. n288 The credits go to those first reactors up to 6,000 megawatts in nameplate capacity filed with the NRC. n289 However, at the time of this note, the NRC has approved four standard design certifications. n290 Because each COL has a reactor with a nameplate capacity between 1,200-1,500 megawatts, at most only four to five reactors would be covered. n291 Therefore, only one or two reactors from each design certification would be built that would qualify for the credit. n292 Thus, this tax credit might not be enough to reduce costs through series production so that subsequent units would be economically viable without a tax credit. n293 Moreover, the production tax credit does not have any adjustment for inflation, which could decrease its benefits to the first new plant to come online. n294 Because the benefit of the production tax credit is uncertain, developers have less incentive to go through with new construction.

## Solvency

## 2nc no solvency

Thorium tech isn't developed enough to be commercial - every attempt to increase the scale has failed---that's Rees. Prefer empirics to predictive evidence—tech predictions are unreliable

**Litton 7** [Paul, Associate Professor of Law at University of Missouri, PhD (2003), University of Pennsylvania JD (1999), University of Pennsylvania Law School ‘ "Nanoethics"? What's New?’, The Hastings Center Report, Vol. 37, No. 1 (Jan. - Feb., 2007), pp. 22-25]

However, we should not spend resources developing the ethics for a Drexlerian world. Predictions about the underlying science and technology are simply too speculative. The history of futurism is fraught with fantastic mistakes by great minds. John von Neumann foresaw global warming, but predicted that by now, nuclear energy would "be free—just like the unmetered air."14 Many of the predictions made in 1975 by Asilomar conferees about recombinant DNA either have never been realized or took longer than expected, and very few of the scientists foresaw the technology's actual or positive ramifications.15

Predicting nanotechnology's long-term future is impossible because it requires foreseeing how it will affect society and how, in return, societal and economic forces will shape it. But just taking nanoscience in isolation, we do not know whether the radical control over nature implied by molecular manufacturing is possible. To break and make atomic bonds on the massive scale required for manufacturing consumer goods, we would need to harness enormous amounts of energy efficiently and cheaply. Nanotechnology, converging with photovoltaics, may make it possible, but it is too speculative.16 If we are discovering a new physics, then decisive claims about what is possible or impossible may be premature. But acknowledging that these futuristic visions have some plausibility does not warrant resources for a new discipline of nanoethics. Even if they are plausible, new, nano-tailored values will not be needed. And anyway, there are serious problems now and on a more probable horizon.

#### Framing issue—their evidence is from an insular group of thorium nuts who think the tech is viable because of small-scale tests—none of that proves commercialization is possible

Tickell 12

Oliver Tickell, As a student of physics at St John's College, Oxford, Tickell holds a masters degree from Oxford University. He is a founding partner of Oxford Climate Associates and a member of the Oxford Geoengineering Institute, April/May 2012, "Thorium: Not ‘green’, not ‘viable’, and not likely", http://www.jonathonporritt.com/sites/default/files/users/Thorium%20briefing%20FINAL%203.7.12.pdf

3.5 State of technology Claim: the technology is already proven. Response: important elements of the LFTR technology were proven during the 1970s Molten Salt Breeder Reactor (MSBR) at Oak Ridge National Laboratory. However, this was a small research reactor rated at just 7MW and there are huge technical and engineering challenges in scaling up this experimental design to make a 'production' reactor. Specific challenges include:  developing materials that can both resist corrosion by liquid fluoride salts including diverse fission products, and withstand decades of intense neutron radiation;  scaling up fuel reprocessing techniques to deal safely and reliably with large volumes of highly radioactive material at very high temperature;  keeping radioactive releases from the reprocessing operation to an acceptably low level;  achieving a full understanding of the thorium fuel cycle.

AND, Customer pressure deters utilities

Eric **Niiler 12**, Washington Post, “Nuclear power entrepreneurs push thorium as a fuel”, February 20, http://www.washingtonpost.com/national/health-science/nuclear-power-entrepreneurs-push-thorium-as-a-fuel/2011/12/15/gIQALTinPR\_story.html

But most U.S. nuclear energy industry executives are wary of both approaches to thorium, saying that neither utilities nor investors are eager to gamble on an unfamiliar technology. “Customers are telling us, ‘Let’s focus on taking [financial] risk off the table, not putting it back on,’ ” said Chris Mowry, president and chief executive of Babcock & Wilcox, a Lynchburg-based firm that is building smaller reactors fueled by uranium. “We view [thorium] as something that’s down the road. It’s more of the science-project phase.”

Reject their authors - commercial and psychological bias

Tickell 12

Oliver Tickell, As a student of physics at St John's College, Oxford, Tickell holds a masters degree from Oxford University. He is a founding partner of Oxford Climate Associates and a member of the Oxford Geoengineering Institute, April/May 2012, "Thorium: Not ‘green’, not ‘viable’, and not likely", http://www.jonathonporritt.com/sites/default/files/users/Thorium%20briefing%20FINAL%203.7.12.pdf

Noting the large volumes of surplus thorium produced as waste in the mining of valuable rare earth metals, there is also a clear commercial interest among the mining companies concerned to give value to this waste. However, we have no evidence of any efforts by mining companies to drive forward the thorium project. A more significant factor is perhaps a deeply-rooted techno-optimism in human psychology – the desire to believe that one or other technology provides ‘the answer’ to deep-rooted problems. Faced with the prospect of ‘peak oil’ and accelerating climate change from the burning of fossil fuels, those who are sceptical about the potential of renewable energy sources will naturally incline towards some other answer. For some, it would seem that thorium fills that particular ‘desire gap’. The established nuclear industry in the UK has little interest in thorium as such, since any use of thorium would create far more cost than it ever saved. However, the mere idea that there exists a notionally ‘green’ version of nuclear power could be seen by the nuclear industry as positive in public relations terms, and useful in promoting the persistence of nuclear power in the UK’s electricity mix.

## at: michigan

#### Their ev says cheap because it can be small—that’s wrong

Makhijani, PhD nuclear fusion – UC Berkeley, president – Institute for Energy and Environmental Research, and Boyd, former director – Safe Energy Program @ Physicians for Social Responsibility, ‘10

(Arjun and Michele, “Small Modular Reactors,” <http://ieer.org/wp/wp-content/uploads/2010/09/small-modular-reactors2010.pdf>)

SMR proponents claim that small size will enable mass manufacture in a factory, enabling considerable savings relative to field construction and assembly that is typical of large reactors. In other words, modular reactors will be cheaper because they will be more like assembly line cars than hand-made Lamborghinis. In the case of reactors, however, **several offsetting factors** will tend to neutralize this advantage and make the costs per kilowatt of small reactors higher than large reactors. First, in contrast to cars or smart phones or similar widgets, the materials cost per kilowatt of a reactor goes up as the size goes down. This is because the surface area per kilowatt of capacity, **which dominates materials cost,** goes up as reactor size is decreased. Similarly, the cost per kilowatt of secondary containment, as well as independent systems for control, instrumentation, and emergency management, increases as size decreases. Cost per kilowatt also increases if each reactor has dedicated and independent systems for control, instrumentation, and emergency management. For these reasons, the nuclear industry has been building larger and larger reactors in an effort to try to achieve economies of scale and make nuclear power economically competitive. Proponents argue that because these nuclear projects would consist of several smaller reactor modules instead of one large reactor, the construction time will be shorter and therefore costs will be reduced. However, this argument fails to take into account the implications of installing many reactor modules in a phased manner at one site, which is the proposed approach at least for the United States. In this case, a large containment structure with a single control room would be built at the beginning of the project that could accommodate all the planned capacity at the site. The result would be that **the first few units would be saddled with very high costs**, while the later units would be less expensive. The realization of economies of scale would depend on the construction period of the entire project, possibly over an even longer time span than present large reactor projects. If the later-planned units are not built, for instance due to slower growth than anticipated, the earlier units would likely be more expensive than present reactors, just from the diseconomies of the containment, site preparation, instrumentation and control system expenditures. Alternatively, a containment structure and instrumentation and control could be built for each reactor. This would greatly increase unit costs and per kilowatt capital costs. Some designs (such as the PBMR) propose no secondary containment, but this would increase safety risks. These cost increases are unlikely to be offset **even if** the entire reactor is manufactured at a central facility and some economies are achieved by mass manufacturing compared to large reactors assembled on site. Furthermore, estimates of low prices must be regarded with skepticism due to the history of past cost escalations for nuclear reactors and the potential for cost increases due to requirements arising in the process of NRC certification. Some SMR designers are proposing that no prototype be built and that the necessary licensing tests be simulated. Whatever the process, it will have to be rigorous to ensure safety, especially given the history of some of proposed designs.

## 2nc too expensive

#### Seriously, basic energy economics takes out the whole aff

Taylor, 11

(Fellow-Energy Policy at Cato, Nuclear Power in the Dock, 4/5, http://www.cato.org/publications/commentary/nuclear-power-dock

This is unfortunate — not necessarily because nuclear power plants are a catastrophic meltdown waiting to happen — but because **nuclear power makes no sense from an economic perspective** and the political campaign to ram these plants down the market's throat threatens catastrophic harm to both taxpayers and ratepayers. The fact that **nuclear power can't come within light-years of passing a market test** is painfully obvious to all who wish to see. Consider the feds are presently telling banks that if they loan money to a utility company to build a nuclear power plant and the loan subsequently goes bad, the U.S. Treasury (that is, you) will compensate the bank for up to 90% of its losses. And yet the banks still refuse to loan. For principled supporters of a free market, that should be information enough about the merits of this commercial enterprise. There are all sorts of reasons why banks are saying "no" to nuclear. Two in particular, however, stand out. First, nuclear energy is **not even remotely competitive in power markets** with gas-fired or coal-fired electricity now or in the foreseeable future. Even the more optimistic projections of new nuclear power plant costs — such as those forwarded by MIT — find that nuclear's production costs over the lifetime of a new facility are about 30% above those for coal or natural gas-fired generators. So while we can only speculate about new plant construction costs (we haven't tried building one for more than 30 years) and estimates vary a great deal, all parties agree on one thing: Nuclear is substantially more expensive than conventional alternatives at present. That's particularly the case when one figures in the revolution in natural gas extraction, which has significantly lowered the cost of gas-fired power. Exelon CEO John Rowe recently told the press that natural gas would have to cost more than $9 per million BTUs before nuclear power plants could compete — about double its current price and far north of the $5.3 per million BTU price over the next 5 to 10 years that forecasters predict for the future. MIT's nuclear energy study, by comparison, projects a $7 per million BTU natural gas price (which makes nuclear energy seem more competitive than it actually is), but of course, the MIT study was based on 2007 data that failed to fully reflect the revolutionary advances in hydraulic fracking. It's worth noting, moreover, that nuclear's hefty price tag would be even heftier if government subsidies were to fall by the wayside. One economist calculates that existing nuclear subsidies are equal to one-third or more of the value of the power produced. Tufts economist Gilbert Metcalf estimates that nuclear power plant operators face a negative 49% tax rate. Hence, banks betting on nuclear power are also betting on the longevity of such breathtaking taxpayer largesse — a risky bet indeed. Second, **the risk of cost overruns** and, thus, defaulted loans are higher than the politicians would have us believe. Most of the nuclear power plants built in this country have cost three times as much to build as utilities initially advertised at the onset of construction. While the industry swears that this is a thing of the past, new power plants being built in Finland and France by Teollisuuden Voima and Electricite de France, respectively — the only nuclear power plants being built right now in free-market energy economies — are already coming far above their advertised cost. The Finnish plant — which was supposed to cost only 3 billion euros — is already 2.7 billion euros above cost and is four years behind schedule. The French plant fairing a bit better, only 1 billion euros over budget and two years behind schedule. The fact that both of these projects deploy state-of-the-art reactors built by French nuclear giant Areva — arguably the most experienced nuclear power company in the world — speaks volumes. Accordingly, both the Congressional Budget Office and the Government Accountability Office expect about 50% of any future U.S. loans to default. So why are utilities trying to build these things in the first place? Well, most aren't. Those few utilities that are interested in going ahead do business in states where construction costs are automatically plugged into the rate base. So in theory at least, risks would be transferred from the utility to the ratepayer with utilities at least guaranteed to break even. Even so, the increasing cost gap between nuclear and gas-fired power makes it unclear whether any of these generators will actually get built. As Peter Bradford, a former member of the U.S. Nuclear Regulatory Commission and former chair of the New York and Maine utility regulatory commissions, puts it, "In truth, the nuclear renaissance has always consisted of the number of plants that government was willing to build." Regardless, federal attempts to jump-start the industry — as Herculean as they have been — haven't come even **close to closing the competitive gap with gas**-fired generation. Events unfolding in Japan are unlikely to change that. And for that, at least, we can all be thankful.

Prefer our ev—recent trends show nuclear is crashing, but their authors always think that the Renaissance is around the corner

Maize, staff writer – POWER Magazine, 8/6/’12

(Kennedy, “A Bumpy Road for Nukes,” POWERnews)

Washington, D.C., 6 August 2012 — It’s been a rough road for nuclear advocates in the U.S. of late, although nothing seems to dent the Pollyanna armor of the nuclear crowd, always appearing to believe a revival is just over the horizon and headed into view. Here are a few fraught developments for the nuclear business that suggest the positive vision just might be a mirage. \* GE CEO Jeff Immelt in a recent interview with the Financial Times revealed a surprising and somewhat uncharacteristic realism with regard to the company’s nuclear future and that of its partner in radioactivity, Hitachi. In London for the Summer Olympics, Immelt told a reporter for the FT, “It’s really a gas and wind world today. When I talk to the guys who run the oil companies, they say look, they’re finding more gas all the time. It’s just hard to justify nuclear, really hard. Gas is so cheap, and at some point, really, economics rule.” For the nuclear industry, economics has always been the fundamental enemy – not the green-tinged, hairy anti-nuke activists, but the folks with the green eye shades, sharp pencils and, today, even sharper spreadsheets. The nuclear execs long have pursued governments as their bulwark against markets, and that has often worked. Today, as Immelt notes, gas has made the market forces so overwhelming, at least in those places such as the U.S. where gas is astonishingly abundant, that even government likely can’t come to the rescue of nuclear power. Could that have something to do with the abject failure of the 2005 Energy Policy Act’s loan guarantee provisions, which have not worked for renewables any better than they have worked for nukes? Indeed, the threat of gas is at least as potentially toxic for many wind and solar projects as it is for nuclear and coal new build. \* In Georgia, the Southern Company is facing what looks like growing problems with its Vogtle project, which aims for two new nuclear units using the unproven but promising Westinghouse AP1000 reactor design. With its federal loan in jeopardy (Southern says it can go ahead without taxpayer funds) and the project running behind schedule and over budget, the Atlanta-based utility now faces lawsuits brought by the reactor vendor and the construction contractor Shaw Group. The amount in dispute, some $29 million, is tiny compared to the multi-billion-dollar price tag for the project. But it may be revealing of ruptures in the deal. Robert Marritz, an energy lawyer and veteran industry observer, publisher of ElectricityPolicy.com, commented that “the very filing of a lawsuit at this stage of the first nuclear plant construction in decades is stunning, reflecting stresses in a relationship that should, one would think, be contained and resolved rather than boiling over into public view.” Indeed, the parties are also engaged in a larger, perhaps nastier, dispute involving $800 million that has not gotten much public exposure. And that’s real money. \* Moving to California, the long-running saga of Edison International’s San Onofre Nuclear Generating Station (SONGS, how’s that for an inept acronym?) continues, with little clarity in sight. The plant has been out of service since January as a result of unexpected and still unexplained tube wear in the plant’s steam generators. According to Bloomberg New Energy Finance, the outage is costing the utility about $1.5 million a day just in lost revenue. The cost to the state in jeopardized reliability hasn’t been calculated, although Edison has started up mothballed gas capacity to fill the supply gap. There is no firm date for restart at the nuclear plant. In the meantime, the California Public Utilities Commission is planning a formal investigation of the outage and Edison’s response, but recently decided to delay that until the utility files a legally-required report with the CPUC November 1. CPUC President Mike Peevey is a former executive with the Los Angeles-based utility.

Natural gas will wreck the industry

WSJ, 3/15/’12

(“Cheap Natural Gas Unplugs U.S. Nuclear-Power Revival”)

What killed the revival wasn't last year's nuclear accident in Japan, nor was it a soft economy that dented demand for electricity. Rather, a shale-gas boom flooded the U.S. market with cheap natural gas, offering utilities a cheaper, less risky alternative to nuclear technology.

"It's killed off new coal and now it's killing off new nuclear," says David Crane, chief executive of NRG Energy Inc., NRG +3.58% a power-generation company based in Princeton, N.J. "Gas has come along at just the right time to upset everything."

Across the country, utilities are turning to natural gas to generate electricity, with 258 plants expected to be built from 2011 through 2015, federal statistics indicate. Not only are gas-fired plants faster to build than reactors, they are much less expensive. The U.S. Energy Information Administration says it costs about $978 per kilowatt of capacity to build and fuel a big gas-fired power plant, compared with $5,339 per kilowatt for a nuclear plant.

Already, the inexpensive natural gas is putting downward pressure on electricity costs for consumers and businesses.

The EIA has forecast that the nation will add 222 gigawatts of generating capacity between 2010 and 2035—equivalent to one-fifth of the current U.S. capacity. The biggest chunk of that addition—58%—will be fired by natural gas, it said, followed by renewable sources, including hydropower, at 31%, then coal at 8% and nuclear power at 4%.

"What utility doesn't want cheap fuel?" says Steve Piper, associate director of energy fundamentals at SNL Financial, a research company. He predicts natural gas will remain the "default fuel" for as long as gas production remains high and prices stay low.

## Prolif

## leadership fails

#### Prolif leadership fails---a few distinctions at the top:

1—the aff can’t solve simply through benign tech transfer—IF economics were the only thing that drove nuclear plant decisions, then obviously there would never be prolif because it’s EXPENSIVE

Lewis 12

Jeffrey Lewis, director of the East Asia Nonproliferation Program at the James Martin Center for Nonproliferation, 8/1/12, It's Not as Easy as 1-2-3, www.foreignpolicy.com/articles/2012/08/01/it\_s\_not\_as\_easy\_as\_1\_2\_3?page=full

Creating market incentives to discourage the spread of enrichment and reprocessing seems like a reasonable thing to do - **except that most states make nuclear decisions on something other than a cost basis**. Nuclear power enthusiasts have been no strangers to wishful thinking, starting with claims that nuclear energy would be "too cheap to meter." Government decisions about nuclear power tend to **prioritize** concerns about **sovereignty** and keeping technological pace with neighbors. It is not hard to see national nuclear programs as something akin to national airlines - money-losing prestige projects that barely take market forces into account. Often, aspiring nuclear states look to countries like the United States and Japan as models. If such countries invest heavily in fuel-cycle services, developing states might **try to copy** them **rather than** simply **become** their **customers**.

#### They can easily find other countries to provide them with nuclear tech

Hibbs 12

Mark Hibbs, Carnegie Nuclear Policy Program Senior Associate, 8/7/12, Negotiating Nuclear Cooperation Agreements, carnegieendowment.org/2012/08/07/negotiating-nuclear-cooperation-agreements/d98z

U.S. resolve to include a no-ENR pledge in the body of new bilateral agreements will be seen by some countries as arrogant and unacceptable. Incorporating ENR terms into side-letters or preambles may be less offensive. That approach would also more easily facilitate including reciprocal commitments by the United States into its 123 bargains with foreign countries. These might include guaranteeing nuclear fuel supply through participation in the U.S. fuel bank, facilitating the country’s access to other back-up sources of nuclear fuel, and, in the future, perhaps even taking back U.S.-origin spent fuel.

The outcome of any negotiation for a bilateral nuclear cooperation agreement will depend on the leverage both sides bring to the table. When the United States negotiated most of the 22 such agreements in force today, it was the world’s leading provider of nuclear technology, equipment, and fuel. As the examples of Jordan and Vietnam show, unlike half a century ago, nuclear newcomers today **don’t need to buy American**.

The vendor field is populated by firms in Argentina, Australia, Canada, the European Union, Japan, Kazakhstan, Namibia, Niger, Russia, and South Korea, and in the future they will be joined by others in China and India. Governments in these countries do not seek to establish a no-ENR requirement as a condition for foreign nuclear cooperation. Some of them, Australia and Canada for example, have strong nonproliferation track records. **Countries** now **seeking** to form **foreign industrial partnerships to set up nuclear power** programs **have numerous options and they will favor arrangements that provide them the most freedom and flexibility**.

#### Cradle to grave fails

McGoldrick 11

Fred McGoldrick, CSIS, spent 30 years at the U.S. State and Energy Departments and at the U.S. mission to the IAEA, negotiated peaceful nuclear cooperation agreements with a number of countries and helped shape the policy of the United States to prevent the spread of nuclear weapons, May 2011, Limiting Transfers of Enrichment and Reprocessing Technology: Issues, Constraints, Options, http://belfercenter.ksg.harvard.edu/files/MTA-NSG-report-color.pdf

**The political obstacles to offering broad-based cradle-to-grave services will be formidable**. With the possible exception of Russia, no major supplier country is currently in a position to provide power reactor fuel to other countries with a firm commitment to take back the used nuclear fuel. France and the UK accept foreign spent fuel for reprocessing but require the return of waste and recovered material to the sending state—although if a market for MOX emerges, they could convert such material to MOX and sell it to utilities in other European states. No other countries have yet been willing to accept other states’ spent nuclear fuel.

## No Impact—Extn

#### Their scholarship is horrible—prefer Hymans—best studies

Potter 8

William C. Potter is Sam Nunn and Richard Lugar Professor of Nonproliferation Studies and Director of the James Martin Center for Nonproliferation Studies at the Monterey Institute of International Studies, Summer 2008, Divining Nuclear Intentions, http://muse.jhu.edu/journals/international\_security/v033/33.1.potter.pdf

For much of the nuclear age, academic experts, intelligence analysts, and public commentators periodically have forecast rapid bursts of proliferation, **which have failed to materialize**. Central to their prognoses, often imbued with the imagery and metaphors of nuclear dominoes and proliferation chains, has been the assumption that one state's nuclearization is likely to trigger decisions by other states to "go nuclear" in quick succession. Today the proliferation metaphors of choice are "nuclear cascade" and "tipping point," but the implication is the same—we are on the cusp of rapid, large-scale nuclear weapons spread. It is with some justification, therefore, that the study of proliferation has been labeled "the sky-is-still-falling profession."1 Although proliferation projections abound, **few of them are founded on, or even informed by, empirical research and theory**.2 This deficiency, though regrettable, is understandable given the small body of theoretically or empirically [End Page 139] grounded research on forecasting proliferation developments, and the underdeveloped state of theory on nonproliferation and nuclear decisionmaking more generally. Also contributing to this knowledge deficit is the stunted development of social science research on foreign policy–oriented forecasting and the emphasis on post hoc explanations, rather than predictions on the part of the more sophisticated frameworks and models of nuclear decisionmaking. Two **important exceptions to this** general **paucity of nonproliferation theory with predictive value are** recent **books by** Jacques **Hymans**, The Psychology of Nuclear Proliferation: Identity, Emotions, and Foreign Policy, and Etel Solingen, Nuclear Logics: Alternative Paths in East Asia and the Middle East.3 These studies merit careful attention because of their solid grounding in comparative field research and social science theory, their challenges to prevailing conceptions about the sources of nuclear weapons decisions, and their promise for predicting proliferation developments. As such, they go well beyond the influential but historically oriented explanatory frameworks developed by scholars such as Peter Lavoy, Ariel Levite, T.V. Paul, Scott Sagan, and James Walsh.4 Although the approaches advanced by Hymans and Solingen have their own limitations, these two books represent the cutting edge of nonproliferation research and should be of great interest to both policy practitioners and scholars. In particular, a careful review of their studies sheds new insights into why past predictions of rapid proliferation have proved faulty, why the current alarm over impending proliferation doom is largely without merit, and why we should not count on single theories of international relations—at least in their [End Page 140] current state—to offer much guidance in explaining or predicting the dynamics of nuclear weapons spread.

## SCS Impact Extn

#### Risk of SCS conflict is high—US influence is critical

Cheng, research fellow – Chinese political and security affairs, and Klingner, senior research fellow for Northeast Asia @ Heritage, 8/2/’12

(Dean, <http://www.heritage.org/research/reports/2012/08/south-china-sea-tensions-reflect-danger-of-defense-budget-cuts>)

In recent months, tensions have risen in the South China Sea as the ongoing territorial disputes between various Southeast Asian states and the People’s Republic of China **have begun to boil.** An April speech by Chinese Defense Minister Liang Guanglie stating that the South Sea Fleet would be the vanguard of major new missions makes recent developments even more ominous. This situation raises real stakes for the United States, especially in the context of ongoing and potentially accelerating cuts to the defense budget.

Increasing Chinese Pressure

China has been steadily increasing pressure on its neighbors in the ongoing South China Sea dispute, employing a variety of means. In March, Chinese and Philippine fishing vessels converged on the disputed Scarborough Shoal, reinforcing each side’s claim to the area. Thinking they had a bargain to de-escalate the conflict, the Philippines pulled out its ships. Although the Chinese did not deploy naval ships to the waters, Chinese fishing boats and civilian law enforcement vessels remained, despite an announced Chinese fishing ban on the area.

At the same time, the Chinese ratcheted up the pressure on Manila by discouraging tourism and imposing additional “inspections” on imports of Philippine bananas. Chinese foreign ministry spokespeople regularly mentioned the Scarborough Shoal in order to remind Manila that the Chinese saw this as a high-profile issue.

Then, in June, the China National Offshore Oil Company announced that it was opening nine new blocks in the South China Sea to bids for exploration and development. All of these blocks are in disputed waters directly off Vietnam’s coast, in some cases within 100 nautical miles of Vietnam’s shores. A few days later, the Chinese ministry of defense announced that it was preparing to start regular naval patrols in the waters around the Spratly Islands, which are claimed by not only China but Brunei, Malaysia, the Philippines, Taiwan, and Vietnam.

Meanwhile, Beijing also exerted heavy pressure on the Association of Southeast Asian Nations (ASEAN) at its annual meeting to reject any statement regarding the South China Sea. Efforts to characterize discussion of the conflict between China and the Philippines led to “unprecedented discord” within ASEAN. “The row illustrated how **Southeast Asian nations have been polarised by China’s rapidly expanding influence** in the region.”[1] Consequently, for the first time in ASEAN’s 45-year history, no joint communiqué was issued, raising real concerns that **the regional organization was in disarray** due to Chinese pressure.

This was then followed by the announcement that the Nansha (Spratlys), Xisha (Paracels), and Zhongsha (Macclesfield Bank) territories would all be administered by a new, prefectural-level political entity called Sansha City (Sansha is literally “three sands,” referring to the three “sha” of the disputed territories). This new political entity is higher than the previous city-level entity that had informally administered these territories. Even more worrisome, the new Sansha prefecture has a military garrison headed by a senior colonel (brigadier general equivalent).[2] Coupled with an earlier announcement that the PLA would now be mounting regular combat-ready patrols of the Spratlys, it would appear that Beijing is prepared to militarize its claims within the so-called “nine-dash line.”[3]

Growing Regional Chinese Military Capabilities

For Beijing, the two decades of nearly unbroken double-digit increases in the People’s Liberation Army (PLA) defense budget provides them with additional military tools with which to underscore China’s claims to the region. For most of the 1990s and 2000s, the focus of the PLA was on Taiwan. Consequently, the best forces tended to be deployed to the Nanjing military region (MR) opposite the island.

As the resources available to the PLA have continued to flow, however, other parts of the PLA have benefited as well. While many analysts have tended to focus on the acquisition of certain new capabilities such as anti-ship ballistic missiles and the addition of a new aircraft carrier (now undergoing sea trials) and have raised concerns with them in association with a Taiwan contingency, the increased largesse has also been reflected in modernization of other portions of the PLA.

This extends to the Guangzhou MR, which is believed to have responsibility for the South China Sea region. A portion of China’s Su-27 fighter fleet, for example, is believed to be assigned to the Guangzhou MR Air Force. The Guangzhou MR has also seen a steady growth in infrastructure, including submarine tunnels on Hainan Island, as well as an array of airbases. (Indeed, in the 2001 EP-3 incident, the U.S. aircraft made an emergency landing at one such base.) Other reports suggest that new rocket artillery systems have been deployed with some units in the Guangzhou MR.[4]

More worrisome, **senior PLA commanders** have hinted that the Guangzhou MR will have additional serious responsibilities and have praised its crisis-response capacities. In April, Chinese defense minister Liang Guanglie praised the MR for its efforts at littoral defense and defense mobilization work. He then stated that the MR will play a leading role in future vital missions (zai zhongda renwu zhong dang jianbing, 在重大任务中当尖兵).[5]

In some ways, the Guangzhou MR is the central repository of China’s forced entry capabilities. Both of China’s two marine brigades are assigned to the South Sea Fleet, which is part of the Guangzhou MR. Similarly, the PLA Air Force’s (PLAAF) three airborne divisions are all believed to be based in the Guangzhou MR (but are controlled by the PLAAF, not the MR).

American Responses

It is in the American interest to help keep the peace in this area, especially as the economic lifelines of such key allies as Japan, South Korea, and Taiwan all transit the waters. The loud statements of a U.S. “pivot” to Asia would seem to have provided an opportune moment for underscoring U.S. ability to maintain regional stability.

## ---Turns Industry

#### No nuclear coop agreements mean no nuclear industry—zero aff

McGoldrick 10

Fred McGoldrick, CSIS, spent 30 years at the U.S. State and Energy Departments and at the U.S. mission to the IAEA, negotiated peaceful nuclear cooperation agreements with a number of countries and helped shape the policy of the United States to prevent the spread of nuclear weapons, 11/30/10, The U.S.-UAE Peaceful Nuclear Cooperation Agreement: A Gold Standard or Fool’s Gold?, http://csis.org/files/publication/101130\_McGoldrick\_USUAENuclear.pdf

On November 14,2010, a number of experts in the nonproliferation field wrote the president urging him not to provide “US federal energy loan guarantees, federal contracts, or other subsidies or assistance to help foreign government-backed nuclear firms expand their nuclear business in the US unless they have committed to apply the nonproliferation standards (including with respect to enrichment and spent fuel recycling) established in the U.S.-United Arab Emirates (UAE) civilian nuclear cooperation agreement in all of their future civilian nuclear cooperation agreements.”11 However, any such proposal would not only **compromise our ability to rebuild our own nuclear industry and to compete in the international market**, but it would also alienate close allies whose cooperation is essential for strengthening the global nonproliferation regime.

In sum, the United States is facing an uphill battle to compete in the international nuclear market and **cannot dictate nonproliferation conditions** that others will find unacceptable. **Nations** embarking on new nuclear programs **do not need to rely on the U**nited **S**tates **for their nuclear fuel**, equipment, components, **or technology**. **They have alternatives and lots of them**, as other states with nuclear programs have steadily built up their nuclear export capacities, which in some cases are state run or state supported.

#### AND squo solves—123 agreements sustain the nuclear industry

Kerr et al 11

Paul K. Kerr, CRS Analyst in Nonproliferation, Mark Holt, CRS Specialist in Energy Policy, Mary Beth Nikitin, CRS Specialist in Nonproliferation, 2011, Nuclear Energy Cooperation with Foreign Countries: Issues for Congress, http://www.fas.org/sgp/crs/nuke/R41910.pdf

U.S. nuclear cooperation agreements with foreign countries are also designed is to help promote growth in the U.S. nuclear industry by facilitating U.S. nuclear exports. As noted, U.S. exports of nuclear plant components, equipment, fuel, and technology have held steady at modest levels since the mid-1990s and comprise a decreasing share of the global market; such exports require nuclear cooperation agreements. That downward trend could be altered by new, higher-efficiency uranium enrichment plants currently planned in the United States and by new U.S. contracts to supply reactor technology and components in China and elsewhere.

Recent plans for nuclear power expansion around the world, particularly in China and India, could lead to future growth in U.S. nuclear reactor exports. A consortium led by Westinghouse signed a contract with Chinese nuclear firms on July 24, 2007, to supply four AP1000 reactors— Westinghouse’s newest design—at a cost estimated at $8 billion.73 The four reactors are currently under construction at two sites. According to the World Nuclear Association, “[a]t least eight more at four sites are firmly planned after them, and about 30 more are proposed to follow.”74 Much like earlier U.S. agreements with South Korea and other countries, the Westinghouse-China deal includes the transfer of the AP1000 technology to Chinese firms, who are expected eventually to be able to build the reactors on their own. Westinghouse is also working with another Chinese consortium to develop larger versions of the AP1000.75 India has announced plans for up to 12 U.S. nuclear reactors at two sites, although no contracts have been signed.76

**U.S.** uranium enrichment **exports could see future growth** resulting from planned new enrichment plants, **despite the scheduled decommissioning of the main existing U.S. plant**. The first new commercial enrichment plant in the United States since the 1950s began commercial production in June 2010 in Lea County, NM. Built by a U.S. subsidiary of the European enrichment firm Urenco, the Lea County plant is to reach full initial capacity by 2013, with further expansion possible. Two other new enrichment plants of similar capacity are planned by the French firm Areva in Idaho and by USEC in Ohio to replace its existing plant in Kentucky. All three planned new plants would use advanced gas centrifuge technology, which is far less energy-intensive than the gaseous diffusion technology used by the existing USEC plant. GE-Hitachi is considering building an enrichment plant using laser enrichment technology that it is developing. If all the planned U.S. enrichment capacity were to come online, and the existing USEC plant shut down, total U.S. enrichment capacity would nearly triple from its current level.77 123 agreements are required for both the construction of these facilities and for the export of enriched uranium.

123 agreements benefit the U.S. nuclear energy program in other ways. For example, licenses under the U.S.-Australia agreement have been primarily for the import of uranium to the United States from Australia. More recently, as noted, foreign firms have been involved in **sustaining the U.S. nuclear energy program** by, for example, participating in nuclear reactor projects in the United States (see discussion above “Increasing Importance of Foreign Suppliers to U.S. Nuclear Power Projects”).

## ---Turns Prolif

#### More restrictions are poison pill for nuclear cooperation agreements—world will shift to other markets—specifically CHINA which takes out the other adv

NEI 12

Nuclear Energy Institute, June 2012, H.R. 1280:

A Misguided Attempt to Control Enrichment and Reprocessing Technologies, http://www.nei.org/resourcesandstats/documentlibrary/newplants/whitepaper/white-paper--hr-1280-a-misguided-attempt-to-control-enrichment-and-reprocessing-technologies

The U.S. no longer plays a dominant role in the international nuclear market and, therefore, is in no position to insist that other countries renounce E&R capabilities. GAO figures show that, between 1994 and 2008, the U.S. share of global nuclear reactor and component exports fell from 11 percent to 7 percent, and fuel exports dropped from 29 percent to just 10 percent.5 Many countries still value U.S. cooperation agreements as a means to gain access to U.S. nuclear technology and trade privileges, and for the ability to handle U.S.-flagged items. But unlike in decades past, alternative sources of reactors, components and fuel are widely available.

The age of U.S. primacy on the international nuclear market is long over, and H.R. 1280’s **insistence that countries renounce E&R** as a condition of a U.S. nuclear cooperation agreement **amounts to a poison pill: no other sup- pliers demand such a concession**, and these suppliers will be the ones that benefit from nations that consider the signing away of E&R rights too steep a price for U.S. collaboration.

Countries Will Not Match the UAE’s Bilateral Commitment

The H.R. 1280 report points to the legally binding commitment by the UAE to forswear E&R in its bilateral nuclear cooperation agree- ment as the proper standard for all U.S. nu- clear cooperation agreements. But the UAE example involves a unique set of economic and political circumstances, and **if the U.S. insists** that **all partners for nuclear cooperation follow suit**, it is likely that **few, if any, additional nuclear cooperation agreements will be negotiated**.

As the H.R. 1280 report acknowledges, the UAE had already voluntarily adopted a national policy to renounce E&R before negotiations for a U.S.-UAE 123 agreement began. The UAE’s decision was likely made easier by the fact that E&R facilities in the UAE would not be profitable in the absence of plans to construct a large reactor fleet. And the UAE does not possess domestic uranium reserves that could supply facilities to enrich fuel for international markets.

The UAE’s acquiescence on E&R should be viewed in its unique context: in 2006, the U.S. Congress had expressed a strong lack of confidence in UAE, and blocked the UAE Government-owned firm Dubai Ports World from operating U.S. ports. Two years later, the UAE was understandably concerned that Congress would ask hard questions about its intentions in the course of considering the U.S.-UAE 123 agreement, and the renunciation of E&R in that agreement helped mute criticism. This set of circumstances is unlikely to be repeated in other cases.

#### Leads to backlash

NEI 12

Nuclear Energy Institute, June 2012, H.R. 1280:

A Misguided Attempt to Control Enrichment and Reprocessing Technologies, http://www.nei.org/resourcesandstats/documentlibrary/newplants/whitepaper/white-paper--hr-1280-a-misguided-attempt-to-control-enrichment-and-reprocessing-technologies

Recent **initiatives to deny E&R technologies** to countries that do not possess them **have provoked** **strong objections** from nuclear supplier and consumer countries alike. In 2004, NSG members and the broader international community lodged forceful complaints against President Bush’s proposal for the NSG to provide fuel assurances only to states that forswear E&R and refrain from transferring E&R technologies to any state that does not possess them. Many **nations consider such efforts discriminatory** and in violation of sovereign rights specifically guaranteed by the Nuclear Non-Proliferation Treaty (NPT) to nonnuclear-weapons states. Uranium producer countries like Australia and Canada have also objected on grounds that they may one day wish to enrich the uranium they produce.

The Non-Aligned Movement (NAM), which includes many prospective partners for U.S. nuclear cooperation, has strongly opposed restrictions on E&R in various international fora, including the IAEA Board of Governors and NPT Review Conferences. The final document of the 2010 NPT Review Conference affirmed the inalienable rights of parties to use nuclear energy peacefully “without jeopardizing its policies for international cooperation agreements and arrangements for peaceful uses of nuclear energy and its fuel-cycle choices.” The document asserted a legitimate right, particularly among developing countries, to full access to nuclear material, equipment and technology for peaceful purposes. The document called on parties to “eliminate in this regard any undue constraints inconsistent with the Treaty.”

## ---AT: Try or Die—Weak 123=Prolif

#### Unrestrictive 123s don’t cause prolif—their evidence misreads intent

NEI 12

Nuclear Energy Institute, June 2012, H.R. 1280:

A Misguided Attempt to Control Enrichment and Reprocessing Technologies, http://www.nei.org/resourcesandstats/documentlibrary/newplants/whitepaper/white-paper--hr-1280-a-misguided-attempt-to-control-enrichment-and-reprocessing-technologies

The report on H.R. 1280 suggests that the global revival of nuclear power will lead many countries developing nuclear energy infrastructure to pursue E&R capabilities. But economic and technical barriers have prevented most states with civil nuclear power programs from doing so. This helps explain why no country that lacks E&R capabilities today has declared plans to acquire them. Nonetheless, many countries want to retain the option of developing E&R capability for legitimate reasons: these capabilities can help ensure a reliable, domestic supply of fuel; they enable the sale of services on the global commercial market; and in the case of reprocessing, they allow for the recovery of usable fuel and a reduction in the quantity and toxicity of nuclear waste.

Despite these realities, the report incorrectly suggests that a refusal by countries to forswear their sovereign right to acquire E&R is “strong evidence that the actual intent is military.”

at: we solve

#### SCS flare-ups escalate, cause US-China war

Buszynski 12

Leszek Buszynski, Visiting Fellow at the Strategic and Defence Studies Centre at the Australian National University, Spring 2012, The South China Sea: Oil, Maritime Claims, and U.S.—China Strategic Rivalry, http://csis.org/files/publication/twq12springbuszynski.pdf

**The risk of conflict escalating from** relatively **minor events has increased in the South China Sea** over the past two years with disputes now less open to negotiation or resolution. Originally, the disputes arose after World War II when the littoral statesÑChina and three countries of the Association of Southeast Asian Nations (ASEAN), Indonesia, Malaysia and the Philippines, as well as Vietnam which joined laterÑscrambled to occupy the islands there. Had the issue remained strictly a territorial one, it could have been resolved through Chinese efforts to reach out to ASEAN and forge stronger ties with the region.

Around the 1990s, access to the sea’s oil and gas reserves as well as fishing and ocean resources began to complicate the claims. As global energy demand has risen, claimants have devised plans to exploit the sea’s hydrocarbon reserves with disputes not surprisingly ensuing, particularly between China and Vietnam. Nevertheless, these energy disputes need not result in conflict, as they have been and could continue to be managed through joint or multilateral development regimes, for which there are various precedents although none as complicated as the South China Sea.

Now, however, the issue has gone beyond territorial claims and access to energy resources, as the South China Sea has become a **focal point for U.S.—China rivalry** in the Western Pacific. Since around 2010, the sea has started to become linked with wider strategic issues relating to China’s naval strategy and America’s forward presence in the area. **This makes the dispute dangerous and** a **reason for concern**, particularly as the United States has reaffirmed its interest in the Asia Pacific and strengthened security relations with the ASEAN claimants in the dispute.

## China

## ev

#### No challengers

Kaplan, senior fellow – Center for a New American Security, and Kaplan, frmr. vice chairman – National Intelligence Council, ‘11

(Robert D and Stephen S, “America Primed,” *The National Interest*, March/April)

But in spite of the seemingly inevitable and rapid diminution of U.S. eminence, to write America’s great-power obituary is beyond premature. The United States remains a highly capable power. Iraq and Afghanistan, as horrendous as they have proved to be—in a broad historical sense—are still relatively minor events that America can easily overcome. The eventual demise of empires like those of Ming China and late-medieval Venice was brought about by far more pivotal blunders.

Think of the Indian Mutiny against the British in 1857 and 1858. Iraq in particular—ever so frequently touted as our turning point on the road to destruction—looks to some extent eerily similar. At the time, orientalists and other pragmatists in the British power structure (who wanted to leave traditional India as it was) lost some sway to evangelical and utilitarian reformers (who wanted to modernize and Christianize India—to make it more like England). But the attempt to bring the fruits of Western civilization to the Asian subcontinent was met with a violent revolt against imperial authority. Delhi, Lucknow and other Indian cities were besieged and captured before being retaken by colonial forces. Yet, the debacle did not signal the end of the British Empire at all, which continued on and even expanded for another century. Instead, it signaled the transition from more of an ad hoc imperium fired by a proselytizing lust to impose its values on others to a calmer and more pragmatic empire built on international trade and technology.1 There is no reason to believe that the fate of America need follow a more doomed course.

Yes, the mistakes made in Iraq and Afghanistan have been the United States’ own, but, though destructive, they are not fatal. If we withdraw sooner rather than later, the cost to American power can be stemmed. Leaving a stable Afghanistan behind of course requires a helpful Pakistan, but with more pressure Washington might increase Islamabad’s cooperation in relatively short order.

In terms of acute threats, Iran is the only state that has exported terrorism and insurgency toward a strategic purpose, yet the country is economically fragile and politically unstable, with behind-the-scenes infighting that would make Washington partisans blanch. Even assuming Iran acquires a few nuclear devices—of uncertain quality with uncertain delivery systems—the long-term outlook for the clerical regime is itself unclear. The administration must only avoid a war with the Islamic Republic.

To be sure, America may be in decline in relative terms compared to some other powers, as well as to many countries of the former third world, but in absolute terms, particularly military ones, the United States can easily be the first among equals for decades hence.

China, India and Russia are the only major Eurasian states prepared to wield military power of consequence on their peripheries. And each, in turn, faces its own obstacles on the road to some degree of dominance.

The Chinese will have a great navy (assuming their economy does not implode) and that will enforce a certain level of bipolarity in the world system. But Beijing will lack the alliance network Washington has, even as China and Russia will always be—because of geography—inherently distrustful of one another. China has much influence, but no credible military allies beyond possibly North Korea, and its authoritarian regime lives in fear of internal disruption if its economic growth rate falters. Furthermore, Chinese naval planners look out from their coastline and see South Korea and a string of islands—Japan, Taiwan and Australia—that are American allies, as are, to a lesser degree, the Philippines, Vietnam and Thailand. To balance a rising China, Washington must only preserve its naval and air assets at their current levels.

India, which has its own internal insurgency, is bedeviled by semifailed states on its borders that critically sap energy and attention from its security establishment, and especially from its land forces; in any case, India has become a de facto ally of the United States whose very rise, in and of itself, helps to balance China.

Russia will be occupied for years regaining influence in its post-Soviet near abroad, particularly in Ukraine, whose feisty independence constitutes a fundamental challenge to the very idea of the Russian state. China checks Russia in Central Asia, as do Turkey, Iran and the West in the Caucasus. This is to say nothing of Russia’s diminishing population and overwhelming reliance on energy exports. Given the problems of these other states, America remains fortunate indeed.

The United States is poised to tread the path of postmutiny Britain. America might not be an empire in the formal sense, but its obligations and constellation of military bases worldwide put it in an imperial-like situation, particularly because its air and naval deployments will continue in a post-Iraq and post-Afghanistan world. No country is in such an enviable position to keep the relative peace in Eurasia as is the United States—especially if it can recover the level of enduring competence in national-security policy last seen during the administration of George H. W. Bush. This is no small point. America has strategic advantages and can enhance its power while extricating itself from war. But this requires leadership—not great and inspiring leadership which comes along rarely even in the healthiest of societies—but plodding competence, occasionally steely nerved and always free of illusion.

## 2nc joint development

#### Joint development means China won’t push the US out

Mark Halper, Smart Planet, 7/3/12, Westinghouse enters U.S.-China nuclear collaboration, www.smartplanet.com/blog/intelligent-energy/westinghouse-enters-us-china-nuclear-collaboration/17252

Pittsburgh-based Westinghouse Electric Co. is playing a supporting role in the U.S. Department of Energy’s and China’s collaborative development of an alternative and potentially safer nuclear reactor - a project for which DOE has funded three U.S. universities, SmartPlanet has learned.

As I reported last week, DOE and the Chinese Academy of Sciences (CAS) have been quietly working together on a reactor design that uses a molten salt coolant auguring safer, more efficient and lower cost reactors that operate at higher temperatures than conventional water-cooled reactors.

The Chinese also intend to use liquid thorium molten salt fuel in a molten salt cooled reactor. Some experts believe that the combination of a liquid thorium fuel and a molten salt-coolant would provide a reactor that is much more efficient than today’s reactors, and that cannot melt down. Supporters claim that thorium molten salt reactors would yield waste that lasts for only hundreds of years instead of uranium’s tens of thousands, and from which it is far more difficult to build a bomb.

Acting Westinghouse CEO Shigenori Shiga.

The U.S. developed a thorium molten salt reactor in the 1960s at Oak Ridge National Laboratory, but abandoned it in favor of more weapons-prone uranium reactors during the Cold War, a story which author Richard Martin tells vividly in his new book, SuperFuel.

Following my report last week based on a purportedly leaked Chinese Academy of Sciences presentation, a DOE spokeswoman confirmed for me that DOE signed an agreement with CAS last December for “cooperation in nuclear energy sciences and technologies.”

Pete Lyons, assistant DOE secretary for nuclear energy, said in an email sent by the spokesperson that,

 “These collaborations will strengthen cooperation between the U.S. and China around next generation nuclear technology, helping to advance mutually beneficial technological advancements and grow civilian nuclear power as a safe, reliable and clean source of energy for both countries.”

#### Solves the adv—its mutually beneficial

John R. Lyman, Atlantic Council, 2009, United States-China Cooperation on nuclear power, http://www.acus.org/files/publication\_pdfs/65/AtlanticCouncil-USChinaNuclearPower.pdf

The U.S. NRC should continue to aid China’s National Nuclear Safety Administration (NNSA) in the development of its regulatory system and training of regulators. A follow-on dialogue should focus on obtaining more information as to how China plans to ramp up its regulatory structure to meet the demands of a rapid deployment of commercial nuclear power across the spectrum of reactors it is currently planning.

7 . As the Chinese nuclear power industry matures, there will be opportunities for Chinese companies to provide services such as uprating, refueling, maintenance

and outage control services. Efforts to establish such cooperation should be initiated in the near term.

8 . To improve the commercial nuclear plant supply chain, China should consider establishing a qualified supplier list. In the process, Chinese companies fabricating components need better training with regard to the American Society of Mechanical Engineers (ASME) standards code.

9 . Commercial entities in both the U.S. and China can take advantage of their competitive edges for mutual benefit. The U.S. has technical competitive edges and China has geographic edges vis-à-vis the developing market for nuclear power. U.S. and Chinese companies can jointly exploit these competitive edges to develop the South East Asian markets.

#### China can’t lock out the US—joint programs tie nuclear development together

John R. Lyman, Atlantic Council, 2009, United States-China Cooperation on nuclear power, http://www.acus.org/files/publication\_pdfs/65/AtlanticCouncil-USChinaNuclearPower.pdf

The U.S. and China signed a Bilateral Civil Nuclear Energy Cooperative Action Plan on September 15, 2007. DOE has similar agreements with Russia, Japan, Australia, and pending signature, France. The organizational structure of the U.S.-China Bilateral activity is shown in Figure 6.

This bilateral activity is up and running with a structure approved by both governments and a plan for future progress. The first meeting under the auspices of the U.S./China Civil Nuclear Energy Cooperation Action Plan focused on advanced fuel cycle technologies, namely fast reactor technology, fuels and separations technologies, and advanced safeguards and physical protection This meeting was held at was held at Argonne National Laboratory (ANL) in), Chicago, Illinois on April 23, 2008. Another meeting of the fuel cycle technology-working group is scheduled to take place the week of May 18th in Beijing, China. Assuming significant progress is made at the May working group, then a formal U.S./China, a Steering Committee meeting could take place either in the summer or fall of 2009. The purpose of this meeting would be to approve of the R&D plan developed in the May meeting, and thereby initiate Phase II of the Action Plan. While it is a somewhat formal process, DOE reports that it is working very well as all parties know what to expect and what the process will produce.

3.4.2 International Cooperation Activities

The U.S. spearheaded the establishment of the Generation IV International Forum (GIF) in July 2001 with nine charter countries, Argentina, Brazil, Canada, France, Japan, South Korea, South Africa, the United Kingdom, and the U.S. Switzerland joined in 2002, EURATOM in 2003, and China and Russia in 2006.

The GIF aims to introduce the Gen IV technologies on a wide scale by 2030. The broad program goals feature:

• Sustainability, promoted by increasing the availability of nuclear fuel and minimizing the waste stream;

• Safety and reliability, with a system that would have a low likelihood and degree of reactor core damage, and a facility that would not need offsite emergency response; Economical system, with life cycle cost advantages over other energy sources and an acceptable level of financial risk; and,

• Proliferation resistance, with little attractiveness as a route for weapons-useable materials and improved physical protection attributes to guard against potential terrorist acts.

Table 6 outlines the six major technologies currently being investigated by the GIF, a summary of their attributes, and the status of their development. Over 100 international experts participated in selecting these technologies.

A Framework Agreement, signed by the GIF partner governments, among other things, specifies R&D projects to be undertaken, assigns the responsible government entities responsible for work, affords intellectual property protection, and allows for multilateral contracts to be given for the R&D work. The focus is on R&D but demonstration plants could conceivably be built under the framework.

China is working on the VHTR projects in the areas of materials testing and components and high performance turbines. China’s fast reactor R&D program compliments the DOE’s AFCI activities, and those of the GIF, and will provide fertile ground for further cooperation.

The U.S. and China also participate in the U.S.-sponsored Global Nuclear Energy Partnership (GNEP). This international collaboration between 25 countries14 focuses on how to foster the creation of civilian nuclear power programs in developing countries and to devise an international nuclear fuel supply framework. The GNEP Working Group, under the GNEP Steering Group, charged with developing “Reliable Fuel Services” met in France in March 2009. According to a statement by DOE deputy press secretary Jen Stutsman to Nuclear Engineering, “The Department [DOE] has already decided not to continue the domestic GNEP program of the last Administration. The long-term fuel cycle research and development program will continue, but not the near-term deployment of recycling facilities or fast reactors.”15 DOE’s fuel cycle research and development program will continue under the name “Advanced Fuel Cycle Initiative” (AFCI).

Both the U.S. and China participate in the International Project on Innovative Nuclear Reactors and Fuel Cycles (INPRO), which was established in 2001 by the IAEA General Conference. Its objectives are to ensure that nuclear energy is available to contribute, in a sustainable manner, to meeting the energy needs of the 21st century and bring together technology holders and users so that they can consider jointly the international and national actions required for achieving desired innovations in nuclear reactors and fuel cycles. It is basically a forum for discussion for experts and policy makers from industrialized and developing countries on all aspects of nuclear energy planning as well as on the development and deployment of innovative nuclear energy systems.

In March 2009 China joined the Global Actinide Cycle International Demonstration (GACID)16 which was formed by France, Japan, South Korea and the U.S. This project, a major GIF activity, is investigating the use of actinide-laden fuel assemblies in fast reactors as part of the sodium- cooled fast reactor program. The work is being undertaken by France’s Atomic Energy Commission, Japan’s Atomic Energy Agency, and the U.S. DOE. The first stage will lead to demonstration fuel containing minor actinides being used in Japan’s Monju reactor.

## 1nr

## bases

#### Status quo solves—Obama has moved to multilateralism on Libya and beyond. The UN is back, and other nations are following the US lead!

**World Outline**, postgraduate student in international affairs at King’s College, **1/24**/2012

[“How valuable is multilateral diplomacy in a post-9/11 world?,” http://worldoutline.wordpress.com/2012/01/24/how-valuable-is-multilateral-diplomacy-in-a-post-911-world/]

At the turn of the last century, 189 world leaders convened at the Millennium Summit and approved the Millennium Declaration which outlined eight specific goals that the United Nations was to achieve by 2015.[4] Yet, just a year later the 9/11 terrorist attacks tilted the world upon its head. The Security Council was rallied into action after the attacks and unanimously backed the United States against the threat which had caused so much devastation.[5] However, a wounded United States became increasingly relentless and unilateral in their ‘War on Terror’; when the Security Council refused to authorise a US attack upon an allegedly nuclear-armed Iraq, the United States, led by George. W. Bush, launched the assault anyway without UN approval.[6] This has been referred to as the ‘crisis of multilateralism’, as the United States undermined the very institution of which it is the biggest financial contributor and the most influential player.[7] If the founding member of the UN was refusing to follow the guidelines of the institution then why should other states follow the rules? This act set a worrying precedent for the rest of the world and, as Kofi Annan asserted, ‘undermined confidence in the possibility of collective responses to our common problems’.[8] Other instances of American unilateralism are Bush’s abstention from the Human Rights Council, his refusal to sign the Kyoto Protocol and the US departure from the Comprehensive Test Ban Treaty. The United States was losing sight of the benefits that multilateral diplomacy has to offer. However, the arrival of Barack Obama at the Oval Office has **revived multilateral values within US foreign policy**. The Obama administration has realised that it must now engage with the UN and this has marked a ‘**transitional moment in the history of multilateralism**’.[9] In his 2010 National Security Strategy, Obama acknowledged the fact that the US had been successful after the Second World War by pursuing their interests within multilateral forums such as the United Nations and not outside of them.[10] The global financial crisis of 2008 and the European Union’s sovereign debt crisis have demonstrated just how interdependent the economies of the western world are and these crises have created an age of austerity in which multilateralism is needed more than ever before.[11] The US has overstretched its resources and is now currently winding down two wars in Afghanistan and Iraq; they have realised that they simply do not have the means to conduct their foreign affairs exclusively anymore. **Clear indications of Washington’s improved multilateral engagement with the UN** since Obama’s inauguration, **and the changing attitude in US foreign policy**, are the economic sanctions negotiated over Iran, Obama’s decision for the US to join the Human Rights Council and, more specifically, its participation in the recent Libya mission. In Libya, the US provided support for the mission, yet played a subdued role in the campaign, allowing its European counterparts to take the lead. In contrast to his predecessor, Obama is displaying pragmatism rather than sentimentalism in his search for partners, making alliances in order to adapt to the emerging multipolar world; this is typified by Obama’s recent visit to the Asia-Pacific and his tour of South America (Brazil, Chile and El Salvador) in 2010. For the time being, US unipolarity looks to be a thing of the past; its **foreign policy is changing from Bush’s unilateralism at the start of the century to a more multilateral approach at the beginning of a new decade** under Obama.[12] This is the **correct precedent** that the most powerful nation in the world should be setting for other states to follow. The fact that the US is now engaging with the UN to counter global problems has restored the credibility that the UN had lost after the Iraq debacle and, by setting this example, **other nations will follow suit** and the international community as a whole can only benefit. From this change in US foreign policy, it is clear that multilateral diplomacy is of more value today than it was a decade ago.

## da

## econ

#### Status quo solves: low natural gas prices guarantee strong manufacturing and 5 million new jobs

Malone, writer for Reuters, 9/21/2012

(Scott, “Export surge could help U.S. add 5 million jobs by 2020: study,” http://www.chicagotribune.com/business/sns-rt-us-usa-manufacturing-exportsbre88k0fu-20120921,0,43650.story)

**Rising U.S. factory productivity**, **spurred by falling natural gas prices**, could help the nation boost exports of products such as locomotives and factory machinery and **add** as many as **5 million manufacturing** and support **jobs** by the decade's end, a new analysis found.

High worker productivity and low energy prices driven by a surge in shale gas production will give the United States a cost advantage in exports against Western European rivals and Japan in the coming years, according to a Boston Consulting Group report set for release on Friday.

#### That swamps any possible nuclear jobs

Boyd, Director of the Safe Energy Program, Physicians for Social Responsibility, 2010

(Michelle, “The Real Story: Nuclear Reactors Are Sub-Prime Energy,” http://nukefree.org/news/safeenergyprogramnuclearreactorsaresubprimeenergy)

**Nuclear Power is Not a Jobs Program**

Some have claimed that building 45 new nuclear reactors by 2030 would create 700,000 new jobs in the U.S. **That wildly exceeds the industry's own figures**. According to sworn testimony by UniStar Nuclear executives before the Maryland Public Service Commission, a 1,600 MW reactor (the largest size being proposed in the US) would create **a maximum of 4,000 short-lived construction jobs and 360 permanent jobs**. **For 45 new reactors**, **that would mean 180,000 temporary jobs and 16,200 permanent jobs** - four times fewer jobs than claimed.

## overview – michigan

#### That flips heg

Gates, former Secretary of Defense under Bush and Obama, 9/17/2012

(Robert, “Strengthening of America,” Center for Strategic and International Studies, Federal News Service, Lexis)

Then the Budget Control Act, signed later that year, required nearly $490 billion more in defense cuts over a decade. So by around the time I retired as secretary of defense in the summer of 2011, defense spending had already been cut by nearly $900 billion over the next 10 years. And that was before we have to deal with the nearly $600 billion in defense -- in reduced defense spending authority that would result of sequestration takes place.

In short, contrary to popular concession -- conception, the defense budget already has been cut, and substantially. **What remains in our military modernization accounts are much needed capabilities relating to air superiority and mobility**, **long-range strike**, **nuclear deterrence**, marine -- **maritime access**, **space and cyberwarfare**, ground forces, intelligence, surveillance and reconnaissance -- capabilities that our nation's civilian and military leadership deem **absolutely critical to the future**. And while there's no equivalent of the former Soviet Union looming on the horizon, I do believe the threats America face today and down the road are, in many respects, more dangerous for their **complexity**, **variety**, **unpredictability** and **likelihood**.

Let me be clear, not every defense dollar is sacrosanct.

One need only spend 10 minutes walking around the Pentagon or any major military headquarters to see excess and redundancy. That's why I initiated an effort in 2010 to wring $100 billion more in overhead efficiencies out of the department over four years. Yet we should not fool ourselves that significant defense budget savings are possible, the kind that might put a dent in the annual federal deficit, without making substantial and, in the case of sequestration, very destructive cuts to the ability of our military to defend the United States and our vital interests around the world.

Consider also the wider fiscal picture. The defense budget may have to be on the table as a matter of political reality, but as a matter of simple math it is not fundamentally the cause of the long- term debt problem. Roughly two-thirds of all federal spending going to entitlements whose share of the budget is escalating rapidly given the changing demographics of the U.S. population. Reducing defense spending by, say, even 15 to 20 percent in the near term would reduce the current annual budget deficit by just one-tenth -- ten percent. **But cuts on that scale would require dramatic reductions in the** size, reduction and overall -- **size**, **readiness and overall capabilities of the U.S. military**.

And we need to be honest with the president, with the Congress, with the American people and with ourselves about what those consequences are -- that a smaller, less ready, less modernized military will be able to go fewer places and be able to do fewer things. And the risks to our men and women in uniform will only increase. **If our elected officials** and body politic **conclude that they truly want a diminished role for the U**nited **S**tates **in the world**, **then we can start** paring back missions and **ratcheting back the corresponding military investments** in force structure. If future defense reductions cannot be avoided, they should be phased in slowly, methodically and strategically, in a way that protects our core security interest and does right by those in uniform.

But the history of past defense drawdowns is not encouraging in this regard. We almost never get it right because no matter how many times we say never again to particular kinds of military operations, **America's adversaries will always have a vote**, as will our future presidents. And if the history of the past century teaches us anything, it is that cutting defense too deeply too quickly, will lead ultimately to higher costs in blood and treasure later.

Since I entered government 45 years ago I have shifted my views and changed my mind on a good many things as circumstances, new information or logic dictated. But I have yet to see evidence that would dissuade me from this fundamental belief: that **America does have a special position and set of responsibilities on this planet**. This status provides enormous benefits for allies, partners and others abroad to be sure, but in the final analysis, the greatest beneficiaries of American leadership in the world are the American people in terms of our security, our prosperity and our freedom.

#### Debt downgrade

Associated Press 9/12/2012

(http://www.indystar.com/viewart/20120912/BUSINESS/209120329/Moody-s-set-downgrade-US-without-budget-deal)

**The U.S. government's debt rating could be heading for the** "**fiscal cliff**" along with the federal budget.

Moody's Investors Service on Tuesday said it likely would cut its "AAA" rating on U.S. government debt, probably by one notch, if budget negotiations fail.

If Congress and the White House don't reach a budget deal, about $1.2 trillion in spending cuts and tax increases will automatically kick in starting Jan. 2, a scenario that's been dubbed the "fiscal cliff," because it is likely to send the economy back into recession and drive up unemployment.

A year ago, Moody's cut its outlook on U.S. debt to "negative," which acts as a warning that it might downgrade the rating, after partisan wrangling over raising the U.S. debt limit led the nation to the brink of default.

#### Turns investment

Maniere 7/28/2011

(George, contributor to Seeking Alpha, “U.S. Debt Downgrade and Its Consequences Too Close for Comfort,” http://seekingalpha.com/article/282627-u-s-debt-downgrade-and-its-consequences-too-close-for-comfort

Despite what you may have heard in the media let me clarify something, the probability of the U.S. defaulting on its debt is very low. The probability of the credit rating getting downgraded grows with every minute. The consequences of a lowering of our credit rating would have disastrous effects. A downgrading of our “AAA” credit rating would mean higher interest rates and subsequently higher costs not only for the U.S. debt but for home loans, credit card rates, student loans and loans to small businesses. The cost of borrowing money would skyrocket for consumers and businesses alike. Likewise, states and municipalities would also face higher borrowing costs. The cost of all capital projects like road repairs, water systems, hospitals and schools would become much more expensive. The ensuing credit crunch would lead to higher borrowing costs for all and we would find ourselves back in March of 2008, only this time we would be 14 trillion dollars deeper in debt. Add to this, with the dollar already in a year-long slump it would continue to sink against the other world’s currencies. S&P has estimated that a downgrade would cause the dollar to drop 10% or more in value. And **a downgrade would cause the dollar to lose its status as the world’s reserve currency**, **an event that would be catastrophic for the U.S. economy**. Combine all of the factors above and I think you will conclude as I have that **the already shaky economy would implode**. **A recession would return** - but this time **with a vengeance**. If Congress cannot get a measure passed in 6 short days I see the economy sinking even lower than it did in 2008 – 2009. The worst part of all is that this scenario would cause the global markets to freeze up and make the failure at Lehman Brothers look like a day at the beach.

## election

The model

Silver, 9-21

“Sept. 21: Presidential Race Changes, but Swing States Stay the Same,” http://fivethirtyeight.blogs.nytimes.com/2012/09/21/sept-21-presidential-race-changes-but-swing-states-stay-the-same/?utm\_source=twitterfeed&utm\_medium=twitter

This is consistent with the post-convention bounce that we’ve seen for Mr. Obama on the whole. The FiveThirtyEight “now-cast” estimates that if an election were held today, Mr. Obama would have a 95 percent chance of winning it. Additionally, he is projected to win the national popular vote by almost five points – up from about two points before the conventions. The three-point gain is the same as in the average Purple Strategies poll.

Our Nov. 6 forecast continues to be more conservative, however, as we still need to account for the possibility that Mr. Obama’s numbers are inflated by the aftereffects of his party’s convention. By this time next week, it will be safer to conclude that Mr. Obama’s gains are permanent, and the forecast will move toward Mr. Obama if Mr. Romney does not make some tangible improvement.

The Electoral College

Burns and Schultheis, 9-19

Alexander Burns and Emily Schultheis, staff writers for politico, 9-19-2012, “Mitt Romney needs poll vault to win,” http://dyn.politico.com/printstory.cfm?uuid=959A544E-2349-4F5C-8407-7C4CF4EB40C8

Mitt Romney faces an increasingly daunting path to victory in the 2012 presidential race, as a wave of national and state-level polling suggests that President Barack Obama has cemented a small but meaningful lead across the battleground states.

Individual polls show varying snapshots of the Obama-Romney race: NBC News and the Wall Street Journal gave Obama a 5-point national lead in a survey published Tuesday night, while an AP-GfK poll released Wednesday morning pegged the president’s lead at just 1 point. Gallup’s tracking poll, meanwhile, showed Obama’s post-convention polling bounce fading to a 1-point lead.

The rosiest picture of the race for Obama came this afternoon from the Pew Research Center, which found Obama drawing 51 percent of the vote to Romney’s 43 percent, leading on nearly every issue question and fighting his challenger to a draw on who would better handle the economy.

From the fog of survey data available on the 2012 race, some consistent, post-convention trends have clearly begun to emerge. In the most credible national polls, Obama rarely leads Romney by more than a few points. But the president is almost invariably in the lead.

(Also on POLITICO: Romney woes jangle GOP nerves)

These polls were taken after the parties’ conventions, but mostly before the release this week of a controversial video of Romney this week in which he says that 47 percent of people don’t pay income taxes and are dependent on the government for services. Some data was collected before the attacks on U.S. diplomatic outposts in North Africa; some was collected afterward.

More problematic for Romney is the state-level data that gives Obama a slight edge in more than enough states to block his challenger from amassing 270 electoral college votes. Because of the makeup of the electoral map, Romney has to win nearly all the swing states on the table, while Obama only has to win a handful.

Of the biggest prizes up for grabs — Ohio, Virginia, Florida and North Carolina — Obama is the favorite in two, according to public surveys. NBC/Wall Street Journal polling and the Democratic firm Public Policy Polling gave Obama an edge in Ohio in the mid-to-high single digits. In Virginia, one survey from the Washington Post and another from Quinnipiac University, CBS News and the New York Times placed Obama at or above the 50 percent mark.

(Also on POLITICO: Romney 2012 RIP? Not so fast)

There has been little public polling in Florida — without which it becomes much harder for Romney to win — and strategists on both sides say the race there remains close. Only in North Carolina is Romney believed to have a slim edge.

In the bigger picture, it would take a national shift of several percentage points or the flipping of more than a few major swing states to put Romney back in the lead, and the momentum — with less than two months to go, doesn’t seem to be moving in the challenger’s direction.

Even if Romney were to win Virginia, North Carolina, Florida, Iowa, Colorado and New Hampshire — all states Obama won in 2008 — the Republican would still be three electoral votes short of victory.

And right now, Romney is not leading in many of those states, leaving him well short of the threshold he needs to clear and under urgent pressure to reshuffle the race’s dynamics.

“The bottom line is, you’d rather be in Obama’s shoes than Romney’s. He has a lead in the battleground states and he probably has to carry fewer of them,” said Marist College pollster Lee Miringoff, who conducts swing-state polls for NBC and the Wall Street Journal.

The problem for Romney, Miringoff said, is that Romney has to be “drawing an inside straight” in the state-by-state numbers in order to cross the 270-vote threshold.

“If you take Florida away from Romney, then it becomes paramount for him to do lots of other states. You take Ohio away, it’s not quite as dramatic but it still leads to the same conclusion,” Miringoff said. “Having said that, there’s also the possibility that the national numbers shift two or three points. The battleground states, although they’re obviously all separate, could react similarly.”

Purple Strategies pollster Doug Usher emphasized the severity of Romney’s electoral college challenge, agreeing that the loss of any one mega-state, like Florida, would deepen Romney’s problems by an order of magnitude everywhere else.

History proves

Klein, 9-17

Ezra Klein, author of the Washington Post’s Wonk Blog, “The Romney campaign is in trouble,” http://www.washingtonpost.com/blogs/ezra-klein/wp/2012/09/17/romney-is-behind-and-the-debates-arent-likely-to-save-him/

On the presidential level, where everyone running campaigns is very, very good at their jobs, campaign infighting and incoherence tend to be the result of a candidate being behind in the polls, not the cause of it. Romney is behind and has been there for quite some time. According to the Real Clear Politics average of head-to-head polls, Romney hasn’t led the race since October 2011. The closest he came to a lead in the polls this year was during the Republican National Convention, when he managed to … tie Obama.

Romney is also behind in most election-forecasting models. Political scientist James Campbell rounded up 13 of the most credible efforts to predict the election outcome: Romney trails in eight of them. He’s also behind in Nate Silver’s election model, the Princeton Election Consortium’s meta-analysis, Drew Linzer’s Votamatic model and the Wonkblog election model.

But I didn’t realize quite how dire Romney’s situation was until I began reading “The Timeline of Presidential Elections: How Campaigns Do and Don’t Matter,” a new book from political scientists Robert Erikson and Christopher Wlezien.

What Erikson and Wlezien did is rather remarkable: They collected pretty much every publicly available poll conducted during the last 200 days of the past 15 presidential elections and then ran test after test on the data to see what we could say about the trajectory of presidential elections. Their results make Romney’s situation look very dire.

For instance: The least-stable period of the campaign isn’t early in the year or in the fall. It’s the summer. That’s because the conventions have a real and lasting effect on a campaign.

“The party that gains pre- to post-convention on average improves by 5.2 percentage points as measured from our pre- and post-convention benchmarks,” write Erikson and Wlezien. “On average, the party that gains from before to after the conventions maintains its gain in the final week’s polls. In other words, its poll numbers do not fade but instead stay constant post-conventions to the final week.”

This year, it was the Democrats who made the biggest gains from before to after the conventions. Obama is leading by 3 percent in the Real Clear Politics average of polls, about double his lead before the Republican convention. If that doesn’t fade by the end of the week or so — that is, if it proves to be a real lead rather than a post-convention bounce — then there’s simply no example in the past 15 elections of a candidate coming back from a post-convention deficit to win the popular vote.

This is about the point where I’m supposed to write: That said, the race remains close, and the debates are coming soon. It’s still anyone’s game.

But the most surprising of Erikson and Wlezien’s results, and the most dispiriting for the Romney campaign, is that unlike the conventions, the debates don’t tend to matter. There’s “a fairly strong degree of continuity from before to after the debates,” they write. That’s true even when the trailing candidate is judged to have “won” the debates. “Voters seem to have little difficulty proclaiming one candidate the ‘winner’ of a debate and then voting for the opponent,” Erikson and Wlezien say.

Gallup agrees. The august polling firm reviewed the surveys it did before and after every televised presidential debate and concluded they “reveal few instances in which the debates may have had a substantive impact on election outcomes. “

The Romney campaign tends to point to two elections to show how its candidate could win this thing. There’s 1980, when Jimmy Carter supposedly led Ronald Reagan until the debates, and 1988, when Michael Dukakis was leading by 13 points after his convention. In fact, Reagan led going into the 1980 debates. And although Dukakis’s convention bounce was indeed large, it was wiped out by Bush’s convention bounce, which put him back in the lead.

That’s not to say Romney couldn’t win the election. A 3 percent gap is not insurmountable. But we’re quickly approaching a point where his comeback would be unprecedented in modern presidential history. And if the Romney campaign begins to crack under the pressure, then that comeback becomes that much less likely.

Republicans agree

VandeHei, Allen, 9-8

Jim VandeHei and Mike Allen, Politico writers, 9-8-2012, “State of the race: Advantage, Obama,” http://dyn.politico.com/printstory.cfm?uuid=7FDC938F-FA40-4E71-901E-10DA26F1E745

President Barack Obama heads out of the national political conventions with a much clearer path to winning, top advisers to Mitt Romney privately concede.

The Romney campaign, while pleasantly surprised by Obama’s lackluster prime-time performance, said the post-convention bounce they hoped for fell well short of expectations and privately lament that state-by-state polling numbers — most glaringly in Ohio — are working in the president’s favor.

(Also on POLITICO: 8 takeaways from the DNC)

“Their map has many more routes to victory,” said a top Republican official. Two officials intimately involved in the GOP campaign said Ohio leans clearly in Obama’s favor now, with a high single-digit edge, based on their internal tracking numbers of conservative groups. Romney can still win the presidency if he loses Ohio, but it’s extremely difficult.

#### Election don’t overwhelm the link—but at margins make agreement more likely

Niels Lesniewski, Roll Call, 9/13/12, Lame Duck Likely to Feature Can-Kicking, www.rollcall.com/features/Guide-to-Congress\_2012/guide/Lame-Duck-Likely-to-Feature-Can-Kicking-217508-1.html

While both sides seem to believe an electoral victory for their party will force the other to capitulate, **those dynamics have rarely played out in lame-duck sessions** of the past, and Congress as a whole has been more apt to defer to the next duly elected Congress on long-term decisions for the country's fiscal policy. Indeed, outside budget experts said there is some reason for optimism on a short-term agreement after the elections, but not much more.

**"Both parties are engaged in a game of three-dimensional chess**," said Maya MacGuineas, president of the Committee for a Responsible Federal Budget.

**The rules of the game will not change** too much **regardless of who wins the presidency and has control of the Senate in January**, she said, because the outlines have already been established and the action must occur before the winners take office. **But** the **agreement is likely to "move slightly" in the direction of the elections' winners,** she said.

## at obama no push

Caruso, ‘10

[Doug, The Colombus Dispatch, 3-7, “The mighty thorium: The nearly perfect energy source nobody has heard of,” http://www.dispatch.com/content/stories/science/2010/03/07/thorium-art-gc67nvgb-1.html]

The Department of Energy approved $200,000 in funding at Oak Ridge for analytical studies this year of molten salt reactors using thorium and uranium, a department spokeswoman said. In 2008, Sen. Orrin Hatch, R-Utah, and Sen. Harry Reid, D-Nevada., introduced a bill that would direct thorium research begin at the Idaho National Laboratory. They introduced a new bill last week.

If the link is true, Obama inevitably gets draw in

Elahe Izadi, National Journal, 8/29/12, Former Sen. Trent Lott, Ex-Rep. Jim Davis Bemoan Partisanship on Energy Issues, www.nationaljournal.com/2012-election/former-members-bemoan-partisanship-on-energy-issues-20120829

In a climate where everything from transportation issues to the farm bill have gotten caught in political gridlock, it will take serious willingness to compromise to get formerly bipartisan energy issues moving from the current partisan standstill.

“If we get the right political leadership and the willingness to put everything on the table, I don’t think this has to be a partisan issue,” former Rep. Jim Davis, D-Fla., said during a Republican National Convention event on Wednesday in Tampa hosted by National Journal and the American Petroleum Institute.

Former Senate Republican Leader Trent Lott of Mississippi said that “Republicans who want to produce more of everything have to also be willing to give a little on the conservation side.”

The event focused on the future of energy issues and how they are playing out in the presidential and congressional races. Four years ago, the major presidential candidates both agreed that climate change needed to be addressed. However, since then, the science behind global warming has come into question by more and more Republicans.

But casting energy as a defense or jobs issue, in the current political climate, will allow debates between lawmakers to gain some steam, Lott and Davis agreed.

The export of coal and natural gas, hydraulic fracturing, and how tax reform will affect the energy industries are all issues that will have to be dealt with by the next president and Congress.

“The job of the next president is critical on energy and many of these issues, and the job is very simple: adult supervision of the Congress,” Davis said.

To that, Lott acknowledged that “Congress is gridlocked because of who is there.… The middle is gone.”

## uq

#### Deal likely but not inevitable—Obama leadership key

Alan Blinder, Wall Street Journal, 3/20/12, The U.S. Cruises Toward a 2013 Fiscal Cliff , online.wsj.com/article/SB10001424052702304459804577281233569546496.html’

At some point, the spectacle America is now calling a presidential campaign will turn away from comedy and start focusing on things that really matter—such as the "fiscal cliff" our federal government is rapidly approaching.

The what? A cliff is something from which you don't want to fall. But as I'll explain shortly, a number of decisions to kick the budgetary can down the road have conspired to place a remarkably large fiscal contraction on the calendar for January 2013—unless Congress takes action to avoid it.

Well, that gives Congress plenty of time, right? Yes. But if you're like me, the phrase "unless Congress takes action" sends a chill down your spine—especially since the cliff came about because of Congress's past inability to agree.

Remember the political donnybrook we had last month over extending the Bush tax cuts, the two-point reduction in the payroll tax, and long-term unemployment benefits? That debate was an echo of the even bigger donnybrook our elected representatives had just two months earlier—and which they "solved" at the last moment by kicking the can two months down the road. And that one, you may recall, came about because they were unable to reach agreement on these matters in December 2010. At that time, President Obama and the Republicans kicked one can down the road 12 months (the payroll tax) and another 24 months (the Bush tax cuts).

The result of all this can kicking is that Congress must make all those decisions by January 2013—or defer them yet again. If the House and Senate don't act in time, a list of things will happen that are anathema either to Republicans or Democrats or both. The Bush tax cuts will expire. The temporary payroll tax cut will end. Unemployment benefits will be severely curtailed. And all on Jan. 1, 2013. Happy New Year!

There's more. As part of the deal ending the acrimonious debate over raising the national debt ceiling last August, the president and Congress created the bipartisan Joint Select Committee on Deficit Reduction, commonly known as the "super committee." It was charged with finding ways to trim at least $1.5 trillion from projected deficits over 10 years. Mindful that the committee might not prove to be that super, Congress stipulated that formulaic spending cuts of $1.2 trillion would kick in automatically if the committee failed.

Sure enough, it failed. So those automatic cuts are headed our way starting Jan. 15, 2013. To make this would-be sword of Damocles more frightening, the formula Congress adopted aimed half the cuts straight at the Pentagon.

Now, you don't really believe the defense budget will be cut that much, do you? Probably the rest won't happen, either. But if it all did, the resulting fiscal contraction—consisting of both tax increases and spending cuts—would be in the neighborhood of 3.5% of gross domestic product, depending on exactly how you count certain items, all at once. That's a big fiscal hit, roughly as big as what a number of European countries are trying to do right now, though with limited success and with notable collateral damage to their economies. An abrupt fiscal contraction of 3.5% of GDP would be a disaster for the United States, highly likely to stifle the recovery.

At this point, you are probably thinking: Well, of course Congress will find ways to wriggle out of its self-imposed budgetary corset. I agree. **But the invisible hand won't do it; someone needs to figure out how**.

It is next to certain that nothing will be done about the fiscal cliff during the election season. In fact, some Republicans are now threatening to renege on the spending cap for fiscal year 2013 that they agreed to last summer. In the absence of progress between now and Election Day, Congress will have about eight weeks left—including Sundays, Thanksgiving, Christmas and New Year's Eve—to either (a) find a solution to the long-running fiscal battle or (b) kick the can down the road again.

Bet on (b). Also bet that the agreement will come just before the bubbly flows on New Year's Eve. An outcome like that is far more likely than falling off the fiscal cliff. But my point is that finding a clever way to kick the can down the road again is becoming a bigger and bigger challenge. And Congress has barely coped with previous such challenges.

Fast forward to December 2012. The lame duck Congress will have on its plate all the issues it had to deal with in the December 2010, August 2011, December 2011, and February 2012 budget battles, plus the automatic cuts mandated by the failure of the super committee, plus the legacy of whatever claims and promises are made during the campaign. We may also be bumping up against the national debt ceiling again. And who will have to sort it all out? A Congress whose days are numbered and whose complexion may have been altered dramatically by the election.

The current betting odds say that President Obama will be re-elected in November, with Republicans controlling both the House and the Senate. Does anyone think a mix like that will be less contentious than the one we have now? And does anyone think that Republicans, seeing control of both houses of Congress on the horizon, will be more compromising in the lame duck than they have been in the recent past?

In sum, while we probably will not fall off the fiscal cliff in January 2013, there are ample opportunities for stumbles and slips between now and then. So wouldn't it be nice if the two parties engaged on this issue prior to Election Day?

## link – michigan

Obama avoiding energy debates until the 2nd term; even popular policies upset the balance of negotiations—that’s Petro Weekly

None of their ev applies to the lame duck

Richard Miniter, investigative journalist, NYTimes best selling author, 2012, Leading from Behind: The Reluctant President and the Advisors Who Decide for Him, google books p. 85-6

After the historic defeat, Axelrod went on to teach a course called Campaign Strategy at Northwestern University in the Chicago suburbs. The day after the election, many White House staffers described their mood as "depressed." The loss of the U.S. House of Representatives and only a skinny remaining majority in the U.S. Senate meant that **passing new programs would be very difficult**. Would the next two years be an endless and enervating siege? Obama seemed strangely upbeat, '[he day after the midterm elections, the president convened a meeting with his senior Staff, While they saw clouds, he saw the sun through them. Democrats still ran both houses of Congress until January 3.2011. when the new session convened. To the surprise of some starters present, he enumerated an ambitious list of measures that he would like to see made law in the next sixty days; "a tax deal, extending unemployment benefits, ratification of New START treaty reducing nuclear arms, repeal of the Pentagon's Don't Ask/ Don't Tell policy preventing gays and lesbians from openly serving in the military, passage of the DREAM Act (which would grant citizenship to undocumented young adults who met certain requirements), and a children's nutrition bill advocated by Michelle Obama."" The list was unrealistic. It would have been a demanding agenda for Congress to accomplish over two years. let alone two months. Besides, **using a "lame duck" Congress to pass major legislation had enormous political risks**. It would be seen as an end-run around voters who had just elected a new majority with a new agenda. When President Carter had used a "lame duck' Congress to pass major bills (including the costly "Superfund" program) following the November 1980 elections in which he lost his reelection bid and Republicans won control of the Senate for the first time since I95-\*. the public was outraged. The outrage would be much bigger this time: Since 1980. the Internet, talk radio, and the Fox News Channel had emerged as powerful forums for channeling outrage. liven if Congress could actually adopt these controversial measures in a few short months, the political price of such a strategy would he high. Still, Obama continued to back Axelrod's analysis, which held that "independent voters wanted a leader who would make all the squabbling schoolchildren in Washington do their assignments."12 Who would do the "assigning"? The voters or the White House? Neither Obama nor Axel-rod seemed to wonder. If the federal government would finally pass a liberal wish list. Axelrod and Obama contended, voters would be happy. It was an unusual view. Independent voters in swing districts had actually voted down candidates who had supported the president's policies in the 2010 elections. Even in safely Democratic districts, independent voters had reduced their support of liberal lawmakers compared with 2008, exit polls showed. Few staffers were persuaded ch.it the president was right, although none dared to contradict him during that meeting. Passing Obama’s priorities during the Thanksgiving and Christmas holiday season had yet another obstacle. A massive White House staff reorganization was in progress. Rahm Emmanuel had stepped down as chief of staff in October 2010 and many other staffers were returning to Chicago or to academia. Without staff, it would be harder to rally the already reluctant Congress to act. Still, **Obama was keen to** proceed as planned. He was **finally** going to **lead, but the timing and strategy were ill-considered**. "Obama didn't care about the criticism that he was too insular," a White House aide said. "He didn't give a shit.\* **Obama's proposals were dutifully sent to Capitol** 1 lill. **but** most **were** essentially **dead on arrival.** **Congress was exhausted and didn't want to take any more political risks**.

#### New spending violates a bipart agreement to keep the government running (link uniqueness too)

Deidre Walsh, CNN, 9/11/12, Congress has little motivation for compromise before election, lexis

After a five-week summer recess, Congress returns to a long list of unfinished business, but with 57 left days before Election Day, it's likely it will tackle only the bare minimum in its short fall session. The one must-pass measure -- a short-term continuing resolution to fund federal agencies -- will avoid any pre-election talk of a government shutdown, with which neither party wants to be tagged. Republican and Democratic leaders struck a deal this summer on a six-month bill, but both chambers still need to pass the legislation before government funding expires at the end of this month. The House is expected vote on the bill Thursday, and two GOP leadership aides predict it will get a sizable bipartisan majority. A senior Senate Democratic aide tells CNN the Senate is expected to approve the measure next week. Rep. Kevin McCarthy, the third-ranking GOP leader in the House, did not directly answer whether a majority of House Republicans would vote for the stopgap spending bill, but said, "I expect that bill to be a bipartisan vote, and I expect the Senate to pass it as well and not add anything to it." What could move -- It's possible that GOP and Democratic leaders could work out a deal on a farm bill to reform agriculture programs and provide some relief to drought-stricken states -- or at least agree to another short-term extension of the current law, according to multiple congressional aides. If they can't reconcile differences between the two varying approaches taken by the House and Senate, some money for drought assistance, plus some money for states affected by recent natural disasters, could be tacked onto the spending bill. McCarthy, who represents some agricultural interests in his California district, told reporters Monday he's still pressing to pass a bill before the election. He acknowledged to reporters on Capitol Hill that "the time frame is tough," but "it's our intent to get it done." -- The Senate will return and work on a veterans jobs bill this week. Senate Democrats are also considering action this month on a housing bill that President Barack Obama included on his congressional "to do" list earlier this summer, but House Republicans haven't expressed any desire to act on it. -- Some key provisions of the federal wiretapping bill known as FISA that was created after the 9/11 terror attacks under President George W. Bush are due to expire at the end of the year, and Congress is expected to pass an extension of the current law. House Republicans have slated a vote this week to renew the current law for another five years. Likely to be punted **The** roughly eight-week **sprint to Election Day means** several **major measures** that lawmakers have failed to make any progress on over the summer **will continue to languish on Capitol Hill**. These include some issues that both parties say they want to address but will have little motivation to compromise on: The renewal of the Violence Against Women Act, a bill providing new cybersecurity protections and legislation to reform the postal service, which recently defaulted on payments to the Treasury Department for employee health plans. In each case, the proposal favored by the GOP-led House is at odds with the bills in the Democrat-controlled Senate. A divided Congress means these issues will be punted into the lame duck session after the election, or even postponed until next year. Less legislating and more campaign messaging While there won't be much legislating, congressional aides say the messages from leaders and rank-and-file members on Capitol Hill will echo the campaign themes of Obama and GOP presidential candidate Mitt Romney, particularly when it comes to the economy and jobs. On his first post-convention stop in New Hampshire on Friday, Obama prodded voters to urge Congress to pass his jobs legislation. "If the Republicans are serious about being concerned about joblessness, we could create a million new jobs right now if Congress would pass the jobs plan that I sent to them a year ago -- jobs for teachers, jobs for construction workers, jobs for folks who have been looking for work for a long time. We can do that," Obama said. Kevin Smith, a spokesman for House Speaker John Boehner, emphasized that the House GOP has already approved legislation aimed at helping the economy. "The House has done its job. We've passed more than 30 jobs bills." Noting that House Republicans have also passed a bill to undo the automatic spending cuts scheduled to go into effect in January and extend all the current tax rates, Smith added, "We are ready to act on all of those measures if the president and Senate Democrats would show some courage to work with on those things with us." Romney continues to highlight the Obama administration's failed loan to the now-bankrupt energy company Solyndra. House Republicans will keep the issue out front with a vote this week on a bill to eliminate the federal loan guarantee program that funded several energy start-ups. Dubbed the "No more Solyndras Act," the GOP bill is expected to pass mostly along party lines, but won't move in the Senate. One open question is whether GOP vice presidential nominee Rep. Paul Ryan of Wisconsin will return to the Capitol for any part of the September session. Under Wisconsin law, Ryan is allowed to also run for his House seat, so he may feel pressure to take a break from barnstorming battleground states to vote on the bipartisan deal to keep the government funded. McCarthy told reporters Monday that Ryan would be back in Washington on Thursday to vote on the continuing resolution, and a Romney campaign official confirmed that. The six-month spending bill keeps the government funded at the level agreed to in last summer's debt deal -- $1.047 trillion. But after criticism from a bloc of conservative House Republicans that the deal didn't cut spending fast enough, Ryan introduced a budget that moved the overall spending level about $20 billion lower to $1.028 trillion. **That budget** passed the House, but **was immediately rejected** by Senate Democrats **as violating the bipartisan** debt **deal**.

#### Specifically nuclear incentives

CTL, 12

(Clean Tech Law, 7/28, “No More Solyndras Bill” is back, http://www.cleantechlaw.org/2012/07/no-more-solyndras-bill-is-back.html#more

It appears that the rebellion by some Republican Congressmen last week against the “No More Solyndras Bill” has been “dealt with” by Republican leadership. No details have emerged on how much blood was shed in putting down the rebellion. The bill is named for a solar manufacturer that received a $500 million dollar loan guarantee and later filed for bankruptcy. **Republicans** have spent a year and a lot of money trying to find wrongdoing by the White House. They found none so they **are trying to end of the loan programs all together.** The bill was before the House Energy and Power Subcommittee last week. Rep. Ed Whitfield (R-KY.), the chairman of the Energy and Power Subcommittee abruptly recessed the hearing after three Republicans expressed concerns about the Republican-sponsored bill according to Politico. Rep. Joe Barton (R-TX), Michael Burgess (R-TX) and Phil Gingrey (R-GA) complained about a provision that would effectively end the loan guarantee program. They argued that it needs to be reformed, not killed. **Republican standard operating procedure is “repeal and probably not replace**.” Keep but reform is not allowed so the hearing came to an abrupt halt. Barton wrote the loan guarantee bill in 2005. House Republicans, Mitt Romney, and national GOP leaders have been bashing President Obama over Solyndra and **the DOE’s broader loan program**. **The overall Republican theme was that the federal government shouldn’t waste taxpayers’ money on handouts to risky renewable energy companies**. The GOP infighting caused The Wall Street Journal editorial board to lambast the Republican lawmakers who raised concerns about the bill, calling them out by name. GOP energy and environmental adviser Mike McKenna said the editorial was both a surprise and a wake-up call to those who have been "wandering" on the issue. “Republicans will be fiscal frauds if they renew the very money-losing energy programs they attacked Barack Obama for,” the WSJ wrote in an editorial that appeared online Wednesday night and in print Thursday. “When the next Solyndra goes bankrupt, voters will have more than Mr. Obama to blame.” That was enough for a trip to the elephant shed. Rep. Whitefield believes he has the votes so they will resume the hearing today and vote on the bill Wednesday morning. He expects the bill to be before the entire House in September after Congress returns from its 5-week vacation The Department of Energy has defended the loan program while conceding it could use some tweeking. The Department has made internal reforms since Solyndra. Secretary Chu has said the program is overall successful. Solyndra and other failures all together represent a smaller loss than Congress itself appropriated for when it passed the legislation under Bush. The DOE says total losses as of now are less than 3% of the total portfolio. That is less than venture capitalists plan for when they invest in new ventures. Mitt Romney bragged about Bain Capital having only a 20% loss on investments it made when he was at the helm. He said that in response to criticism about the Bain-owned companies that went bankrupt causing thousands to lose their jobs. The loan-killing bill is being supported by the American Energy Alliance (AEA) the lobbying arm of the Institute for Energy Research (IER). This is group largely funded by oil and gas companies whose objective is essentially to debunk and kill renewable energy using “research.” AEA President Thomas Pyle said in a statement: “Either you stand with Solyndra and other bankrupt experiments in politicized venture capital, or you stand with hardworking American taxpayers. Either you want to protect rent-seeking cronies in the renewable industry, or you want to preserve the sacred trust of the men and women who sent you to Washington.” It is no surprise **Republicans dance to that tune.** The bill is the pet project of Republican House Leadership including Speaker Boehner and Leader Eric Cantor. Boehner has received $241,600 in campaign contributions from oil and gas companies this election cycle. Eric Cantor (RTP-VA) has received $176,250.

## pc key

#### Political capital is finite and drives decisionmaking

**Schier 9**, Professor of Poliitcal Science at Carleton, (Steven, "Understanding the Obama Presidency," The Forum: Vol. 7: Iss. 1, Berkely Electronic Press, <http://www.bepress.com/forum/vol7/iss1/art10>)

 In additional to formal powers, a president’s informal power is situationally derived and highly variable. Informal power is a function of the “political capital” presidents amass and deplete as they operate in office. Paul Light defines several components of political capital: party support of the president in Congress, public approval of the presidential conduct of his job, the President’s electoral margin and patronage appointments (Light 1983, 15). Richard Neustadt’s concept of a president’s “professional reputation” likewise figures into his political capital. Neustadt defines this as the “impressions in the Washington community about the skill and will with which he puts [his formal powers] to use” (Neustadt 1990, 185). In the wake of 9/11, George W. Bush’s political capital surged, and both the public and Washington elites granted him a broad ability to prosecute the war on terror. By the later stages of Bush’s troubled second term, beset by a lengthy and unpopular occupation of Iraq and an aggressive Democratic Congress, he found that his political capital had shrunk. Obama’s informal powers will prove variable, not stable, as is always the case for presidents. Nevertheless, he entered office with a formidable store of political capital. His solid electoral victory means he initially will receive high public support and strong backing from fellow Congressional partisans, a combination that will allow him much leeway in his presidential appointments and with his policy agenda. Obama probably enjoys the prospect of a happier honeymoon during his first year than did George W. Bush, who entered office amidst continuing controversy over the 2000 election outcome. Presidents usually employ power to disrupt the political order they inherit in order to reshape it according to their own agendas. Stephen Skowronek argues that “presidents disrupt systems, reshape political landscapes, and pass to successors leadership challenges that are different from the ones just faced” (Skowronek 1997, 6). Given their limited time in office and the hostile political alignments often present in Washington policymaking networks and among the electorate, presidents must force political change if they are to enact their agendas. In recent decades, Washington power structures have become more entrenched and elaborate (Drucker 1995) while presidential powers – through increased use of executive orders and legislative delegation (Howell 2003) –have also grown. The presidency has more powers in the early 21st century but also faces more entrenched coalitions of interests, lawmakers, and bureaucrats whose agendas often differ from that of the president. This is an invitation for an energetic president – and that seems to describe Barack Obama – to engage in major ongoing battles to impose his preferences.

#### Presidents perceive their capital as finite – our theory is true in practice

**Marshall and Prins 11**, BRYAN W. MARSHALL Miami University BRANDON C. PRINS University of Tennessee & Howard H. Baker, Jr. Center for Public Policy Power or Posturing? Policy Availability and Congressional Influence on U.S. Presidential Decisions to Use Force Presidential Studies Quarterly 41, no. 3 (September) 2011

We argue that the more important effect of Congress occurs because presidents anticipate how the use of force may affect the larger congressional environment in which they inevitably have to operate (Brulé, Marshall, and Prins 2010). It may be true that presidents consider the chances that Congress will react to a specific use of force with countervailing tools, but even more importantly they anticipate the likelihood that a foreign conflict may damage (or advantage) their political fortunes elsewhere—in essence, the presidential calculus to use force factors in how such actions might shape their ability to achieve legislative priorities. To be clear, presidents can and do choose to use force and press for legislative initiatives in Congress. Taking unilateral actions in foreign policy does not preclude the president from working the legislative process on Capitol Hill. However, political capital is finite so spending resources in one area lessens what the president can bring to bear in other areas. That is, presidents consider the congressional environment in their decision to use force because their success at promoting policy change in either foreign or domestic affairs is largely determined by their relationship with Congress. Presidents do not make such decisions devoid of calculations regarding congressional preferences and behavior or how such decisions may influence their ability to achieve legislative objectives. This is true in large part because presidential behavior is motivated by multiple goals that are intimately tied to Congress. Presidents place a premium on passing legislative initiatives. The passage of policy is integral to their goals of reelection and enhancing their place in history (Canes-Wrone 2001; Moe 1985). Therefore, presidents seek to build and protect their relationship with Congress.

#### Prefer issue specific evidence

**Jacobs and King 10**, University of Minnesota, Nuffield College, (Lawrence and Desmond, “Varieties of Obamaism: Structure, Agency, and the Obama Presidency,” Perspectives on Politics (2010), 8: 793-802)

Yet if presidential personality and leadership style come up short as primary explanations for presidential success and failure, this does not render them irrelevant. There is no need to accept the false choice between volition and structure—between explanations that reduce politics to personality and those that focus only on system imperatives and contradictions. The most satisfying explanations lie at the intersection of agency and structure—what we describe as structured agency. Presidents have opportunities to lead, but not under the circumstances they choose or control. These circumstances both restrict the parameters of presidential impact and highlight the significance of presidential skill in accurately identifying and exploiting opportunities. Indeed, Obama himself talks about walking this tightrope—exercising “ruthless pragmatism” in seizing opportunities for reform while accepting the limits and seeking to “bridge that gap between the status quo and what we know we have to do for our future”.12

## 2nr

#### They say ideology – obviously polarization is high – (thanks Ornstein!), but that just means navigating a balancing act is key

Matthew N **Beckmann and** Vimal **Kumar 11**, Associate Professor of Political Science at UC Irvine, econ prof at the Indian Institute of Tech, “Opportunism in Polarization”, Presidential Studies Quarterly; Sep 2011; 41, 3

But, of course, gridlock is not an all-or-nothing proposition. Although polarization certainly inhibits lawmaking (Barrett et al. 1997; Binder 1999, 2003; Coleman 1999; Howell etal. 2000; Jones 2001; Kelly 1993), significant laws continue to pass— underunified and divided government, and even in the face of substantial polarization (see esp. Mayhew 2005). This article considers these exceptions to the general rule. Specifically, building on Snyder (1991) (see also, Beckmann and McGann 2008; Groseclose and Snyder 1996) we develop a simple game-theoretic model in which the president allocates scarce political capital to induce changes in senators' votes and, in turn, show how a polarized chamber, compared to one with more homogenous preferences, can actually improve a president's prospects for winning important roll-call votes and passing preferred legislation. Wc test this hypothesis against data on presidents' success on key Senate roll-call votes from 1953 to 2008.1

#### It’s not about arm-twisting – their authors ignore other presidential tools

**Kuttner**, Senior Fellow – Demos; and Co-Editor – American Prospect, 5/16/**11**

(Robert, “Barack Obama's Theory of Power,” The American Prospect, <http://prospect.org/cs/articles?article=barack_obamas_theory_of_power>)

As the political scientist Richard Neustadt observed in his classic work, *Presidential Power*, a book that had great influence on President John F. Kennedy, the essence of a president’s power is “the power to persuade.” Because our divided constitutional system does not allow the president to lead by commanding, presidents amass power by making strategic choices about when to use the latent authority of the presidency to move public and elite opinion and then use that added prestige as clout to move Congress. In one of Neustadt’s classic case studies, Harry Truman, a president widely considered a lame duck, nonetheless persuaded the broad public and a Republican Congress in 1947-1948 that the Marshall Plan was a worthy idea. As Neustadt and Burns both observed, though an American chief executive is weak by constitutional design, a president possesses several points of leverage. He can play an effective outside game, motivating and shaping public sentiment, making clear the differences between his values and those of his opposition, and using popular support to box in his opponents and move them in his direction. He can complement the outside bully pulpit with a nimble inside game, uniting his legislative party, bestowing or withholding benefits on opposition legislators, forcing them to take awkward votes, and using the veto. He can also enlist the support of interest groups to pressure Congress, and use media to validate his framing of choices. Done well, all of this signals leadership that often moves the public agenda.

#### Momentum

**Edwards 9**, Distinguished Professor of Political Science at Texas A&M University, (George C, “ The Strategic President: Persuasion and Opportunity in Presidential Leadership,” Princeton University Press, <http://press.princeton.edu/chapters/s8891.html>)

The American political system is not a fertile field for the exercise of presidential leadership. Most political actors are free to choose whether to follow the chief executive’s lead; the president cannot force them to act. At the same time, the sharing of powers established by the Constitution prevents the president from acting unilaterally on most important matters and gives other power holders different perspectives on issues and policy proposals. Thus, the political system compels the president to attempt to lead while inhibiting his ability to do so. These imperatives present the primary challenge to his political leadership. Harry Truman, writing to his sister, reflected on the job of president: Aside from the impossible administrative burden, he has to take all sorts of abuse from liars and demagogues.... The people can never understand why the President does not use his supposedly great power to make ‘em behave. Well, all the President is, is a glorified public relations man who spends his time flattering, kissing and kicking people to get them to do what they are supposed to do anyway.22 Despite Truman’s frustration, presidents often succeed in achieving changes in public policy, some of which are of historic significance. Coupling this fact with the lack of systematic evidence that presidents succeed in persuasion and plenty of evidence that they frequently fail to achieve the policy changes they desire presents a conundrum. What explains their success when they have it? If persuasion is not the key, then what is? If persuasion plays a minor part in presidential leadership, it does not follow that leadership is unimportant. Successful leadership may have another explanation. In some cases, presidents may not need to rely on persuasion because there is already sufficient support for their policy stances. In other instances, there may be latent support that requires activation by the president and his supporters. In all cases, presidents who are successful in obtaining support for their agendas have to evaluate the opportunities for change in their environments carefully and orchestrate existing and potential support skillfully. Although it is not common for students of politics to articulate leadership as recognizing and exploiting opportunities for change, these—rather than persuasion—may be the essential presidential leadership skills.