Petition to Declare NEI Advertisements False and Misleading

INTRODUCTION

As organizations concerned about environmental quality, we are jointly filing a complaint against a misleading print media advertising campaign that a nuclear energy trade group, the Nuclear Energy Institute (NEI), is conducting. NEI views the deregulation of the electric industry as an opportunity to promote nuclear power as an environmentally benign source of energy. Because consumers are being mislead by these false advertisements, we demand that the Federal Trade Commission (FTC) prohibit further use of these advertisements.

The targets of the NEI campaign are consumers who now have a choice of electricity suppliers. Research shows that some consumers appear willing to pay extra for so-called Agreen power@ in an effort to protect the environment. Therefore, some companies are attempting to differentiate their product by marketing it as good for the environment. If this marketing is inaccurate, consumers may wrongly purchase electricity because they were led to believe it was good for the environment; deception has occurred.

In a deregulated market for electricity, any advertising that portrays a particular source of electricity as environmentally safe must at least satisfy the FTC = Guides for the Use of Environmental Marketing Claims. FTC Chairman Robert Pitofsky has specifically addressed issues of potential consumer fraud in the marketing of Agreen electricity@ by stating that the Guides are the appropriate tool for protecting consumers. Thus we bring this complaint to you.

This complaint documents several environmental problems associated with nuclear power including greenhouse gas emissions, air pollution, highly irradiated nuclear waste, so-called Alow level@ nuclear waste, species destruction and water pollution. The NEI advertisement misleads consumers by making false claims, ignoring significant environmental impacts, and making overly broad statements as defined by the Guides. The advertisements make use of consumer demands and perceptions to convey misleading information. We conclude that NEI is greenwashing its product, nuclear power. Therefore,

---

1 Nuclear Energy Institute I Street, N.W., Suite 400 Washington, D.C. 20006-3708 (202)739-8000


3 16 CFR part 260 (hereinafter known as the Guides)


5 Greenwashing is defined as a product being marketed as good for the environment, when in fact, it has
the FTC must prohibit future advertisements of this nature so as to prevent further deception of the consumer.

**ACTIONS DESIRED TO PROTECT CONSUMERS**

We, the undersigned organizations, ask that the Federal Trade Commission, under Section 5 of the FTC Act and the *Guides* (16 CFR Part 260), prohibit the NEI from using advertisements or promotional material that present the misleading and false claims listed below.

**NEI ADVERTISEMENTS CLEARLY DECEIVE CONSUMERS BY DISTORTING THE ALLEGED CLEAN AIR BENEFITS**

The NEI advertisements are not in compliance with the *Guides* and they are resulting in consumer deception. The advertisements violate the section, *General Principles: Overstatement of Environmental Attribute* (16 CFR Part 260.6.c). This section provides that overstating an environmental attribute or benefit should be avoided to prevent deception. In fact, the *Guides* suggest that marketers should avoid implications of significant environmental benefits if the benefit is in fact negligible.

**THE MISLEADING ADVERTISEMENTS**

The advertisements state that,

1. *A nuclear plants are also the largest energy source that produces no greenhouse gas emissions, so they help protect the environment.* (1998)


3. *A nuclear power plants don’t burn anything to produce electricity, so they don’t pollute the air.* (1998)

negative environmental impacts.
4. **A**Chances are you know nuclear power generates about 20 percent of America’s electricity without emitting greenhouse gases, ...@1999)

Distortion of the Alleged Clean Air Benefits

The NEI’s advertisements exaggerate nuclear power’s alleged role in reducing greenhouse gas emissions and ignore many clean air concerns directly attributable to electricity generated by nuclear power plants.

Specifically, the statements (i) and (ii) and (iv) point to the exaggeration of the alleged benefit to the environment by suggesting nuclear power creates zero greenhouse gas emissions, despite the industry's own documents that explain otherwise. Statement (iii) begins with a true statement but incorrectly applies it to the rhetoric regarding nuclear power's alleged benefits.

To clarify the facts about nuclear power’s alleged global warming benefits, an assessment of environmental impacts must proceed beyond the immediate and most easily identifiable impacts. Uranium enrichment, an electricity-intensive process, is essential for producing nuclear reactor fuel, thus environmental impacts from this process must be considered when making environmental claims about nuclear generated electricity. The NEI’s own website offers this clarification to its claims of no greenhouse gas emissions: **A**While no CO\(_2\) is released in the production of one million kilowatt-hours of nuclear electricity, about 10 metric tons of carbon are emitted during the enrichment of the uranium fuel, because the uranium enrichment plants use power from coal-fired power plants.**A**Other nuclear industry documents establish that the massive use of electricity for this fuel enrichment process emits 4% of the greenhouse gas emissions that would have been emitted by an equivalent coal plant. Therefore, NEI’s advertisements mislead consumers by making the absolute claim of zero emissions. The advertisements also deceive consumers with false clean air claims. Significant amounts of nuclear fuel are generated at two uranium enrichment plants in the Ohio River Valley, which use power primarily from three coal power plants, Kyger Creek, Clifty Creek and Joppa. Two of these plants emit NO\(_x\) and
SO\textsubscript{2} into the environment, which are the primary contributors to smog, particulate matter, and acid rain concerns. Kyger Creek is the 11\textsuperscript{th} highest emitter of NO\textsubscript{x} and 12\textsuperscript{th} highest emitter of SO\textsubscript{2} in the nation. Clifty Creek is the 6\textsuperscript{th} highest emitter of NO\textsubscript{x} and 23\textsuperscript{rd} highest emitter of SO\textsubscript{2} in the nation. The NEI clear air claims cannot be reconciled with the pollution created by the operation of uranium enrichment plants.\footnote{Letter to former Secretary of Energy Federico Peña from the Environmental Law and Policy Center of the Midwest, Ohio Citizen Action, Citizens Action Coalition of Indiana, Ohio Environmental Council, Hoosier Environmental Council, and Ohio Public Interest Research Group. December 31, 1997.}

**Deception From Clean Air Claims**

These facts make it obvious that an advertiser of nuclear power cannot claim that nuclear power plants emit *no* greenhouse gas emissions. Information about greenhouse gases is important to the consumer. A clear 86% of the public expects electric companies to care about air pollution. When ranked against other environmental concerns, air pollution ranks second.\footnote{Winneg, Kenneth and Melissa J. Herrmann, Chilton Research Services; Alan Levy and Brian Roe, U.S. Food and Drug Administration. Consumer Knowledge, Practices, and Attitudes: Electric Utility Deregulation and Consumer Choice. Baseline Survey. Consumer Information Disclosure Project. January, 1998. National Council on Competition and the Electric Industry:5-6} The importance of this issue to the consumer impacts their purchasing decision. Thus the false information will alter a consumer’s purchasing decision. To disseminate to consumers the definitive statement of *no emissions* is deceptive.
NEI’s ADVERTISEMENTS CLEARLY DECEIVE CONSUMERS BY IGNORING MULTIPLE SIGNIFICANT ENVIRONMENTAL IMPACTS

These advertisements also violate the General Principles: Overstatement of Environmental Attribute (16 CFR Part 260.6.c) in another respect. Marketing claims that highlight one environmental benefit must also disclose all the other environmental impacts. Environmental impacts cannot be traded one for the other in order to mislead consumers. Please note Example 4, which is directly analogous to the advertisements in question.

Example 4: A package of paper coffee filters is labeled “These filters were made with a chlorine-free bleaching process.” The filters are bleached with a process that releases into the environment a reduced, but still significant, amount of the same harmful byproducts associated with chlorine bleaching. The claim is likely to overstate the product’s benefits because it is likely to be interpreted by consumers to mean that the product’s manufacture does not cause any of the environmental risks posed by chlorine bleaching. A claim, however, that the filters were “bleached with a process that substantially reduces, but does not eliminate, harmful substance associated with chlorine bleaching” would not, if substantiated, overstate the product’s benefits and is unlikely to be deceptive.

Deception occurred in this example because consumers are likely to interpret that the claim of a chlorine-free process would not cause any of the environmental risks posed by the chlorine process. This form of deception is prevalent throughout the NEI’s advertisements.

THE MISLEADING ADVERTISEMENTS

The advertisements state that,

1 “...nuclear energy plants enable us to maintain that quality of life ... without polluting the environment.” (1998)

2 “Nuclear energy generates electricity without polluting air and water.” (1998)

3. A. nuclear power - one of our cleanest sources of electricity - ” (1999)
nuclear power—one of our cleanest sources of electricity—

4. **At** the same technology that enables more than 100 nuclear power plants to produce valuable electricity and help keep our air clean@1999)

   It's the same technology that enables more than 100 nuclear power plants to produce valuable electricity and help keep our air clean.

Statement (i), (ii), (iii) and (iv) attempt to portray overall environmental benefits from the use of nuclear power while ignoring such environmental problems as the production of highly irradiated nuclear waste, so-called **A**low level**A waste, species destruction, and thermal water emissions.

**HIGHLY IRRADIATED NUCLEAR WASTE**

The greatest environmental threat created by nuclear power production is from the highly irradiated nuclear waste and the lack of a permanent disposal system for this dangerous material. A person standing one yard away from unshielded 10-year-old waste would receive a lethal dose of radiation in less than three minutes. A 30-second exposure from the same distance would significantly increase the risk of cancer or genetic damage.\(^{10}\) This waste remains toxic for 240,000 years and radioactive for over a million years. Department of Energy (DOE) statistics indicate that in 1997 the total mass of permanently discharged spent nuclear fuel from all commercial reactors reached approximately 36,000 metric tons of uranium (MTUs).\(^{11}\) The DOE predicts 86,000 MTUs of waste could be produced by 2035.\(^{12}\)

Based upon the above information, any claim that this waste is contained and consequently non-polluting is misleading. Nuclear power stations currently house their highly radioactive waste at on-site facilities that were initially intended to be temporary. At the same time, the extremely long hazardous lives of a number of radioactive elements generated in nuclear power plants make it impossible to confidently assert that any permanent disposal practices will be adequate. Current DOE plans to dispose of this highly irradiated nuclear waste are contingent upon finding Yucca Mountain, Nevada, to be a suitable permanent geological repository. No such determination has been made, despite years of scientific study. In November of 1998, 219 environmental organizations petitioned the Department of Energy to

---


\(^{12}\) ibid.
disqualify the site based on current law and current science. The fate of Yucca Mountain is at best uncertain.¹³

Finally, it is unreasonable to believe that highly toxic radioactive waste will remain isolated from the surrounding communities and their groundwater if buried. In fact, the DOE has on occasion referred to Nevadans as "dose receptors" instead of citizens. The term dose receptor is a reference to the humans expected to receive doses of radionuclides.¹⁴ When a citizen of our nation is renamed a dose receptor because of commercial nuclear power plant waste, advertisements claiming these plants to be producing electricity "without polluting the environment" are preposterous.

**DECEPTION FROM IGNORING HIGHLY IRRADIATED NUCLEAR WASTE**

Deception resulting from the advertisements is certain because of consumers attitudes about electric utilities and their nuclear waste. Eighty-five percent of the public expects electric companies to care about nuclear waste they create. When ranked against other environmental concerns, nuclear waste ranks first.¹⁵ The importance of this issue to the consumer impacts their purchasing decisions. Thus the failure to disclose important information will alter a consumer's purchasing decision. To place an advertisement that touts nuclear power's environmental attributes while ignoring the largest environmental concern of consumers is deceptive.

**SO-CALLED LOW LEVEL NUCLEAR WASTE**

Nuclear power also produces so-called low level nuclear waste that contains large amounts of radioactivity. Operation of a reactor permits any radionuclide from the highly irradiated nuclear waste to also be present in low level waste.¹⁶ In fact, low level wastes contain significant amounts of plutonium. The Beatty, NV, dump has 47 pounds, the Richland, WA, dump has 450 pounds, and the Maxey Flats, KY, dump has 140 pounds of plutonium.¹⁷

¹³Yucca Mountain faces several issues of concern, including seismic activity, rainwater intrusion and an unstable water table. Within 50 miles of Yucca Mountain, 621 seismic events greater than 2.5 on the Richter scale have occurred in the past 20 years. The ability of rainwater from the surface to penetrate to the repository depth in only 40 years has destroyed previous assumptions that this rainwater would not reach the repository for thousands of years. Finally, the uncertainties concerning the groundwater table leave this critical exposure pathway potentially vulnerable.


¹⁵supra note 8 at 5-6.


¹⁷ibid. at 53.
Through 1992, low level nuclear waste from civilian uses has amassed 1,472,129 cubic meters, consisting of 13,220,102 curies.\textsuperscript{18} Nuclear power plants generate the vast majority of this waste. The typical 1,000 megawatt boiling water reactor and pressurized water reactor generates 10,889 curies and 2,069 curies, respectively.\textsuperscript{19} Unfortunately, the low level waste has never been disposed of in a manner that would isolate it from the environment. The following table shows that every low level radioactive waste dump in the U.S. has leaked.

\textsuperscript{18}Oak Ridge National Laboratory. Integrated Data Base for 1993: U.S. Spent Fuel and Radioactive Waste Inventories, Projections, and Characteristics. Department of Energy. 139-140. Note: These numbers do not include Greater than Class C (GTCC) waste which is normally included in low level waste totals.

### Status of Commercial Low Level Waste Dumps

<table>
<thead>
<tr>
<th>Name, State</th>
<th>Dates of Operation</th>
<th>Evidence of Leakage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beatty, Nevada</td>
<td>1962 - 1992</td>
<td>Tritium and C\textsuperscript{14} detected off-site \textsuperscript{a}</td>
</tr>
<tr>
<td>Maxey Flats, Kentucky</td>
<td>1963 - 1977</td>
<td>Superfund site - Plutonium and several other radionuclides are migrating \textsuperscript{b}</td>
</tr>
<tr>
<td>West Valley, New York</td>
<td>1965 - 1975</td>
<td>Tritium detected in adjacent steam \textsuperscript{c}</td>
</tr>
<tr>
<td>Richland, Washington</td>
<td>1967 - present</td>
<td>Tritium 85ft below dump and in vegetation \textsuperscript{d}</td>
</tr>
<tr>
<td>Sheffield, Illinois</td>
<td>1971 - present</td>
<td>Tritium detected in Trout Lake \textsuperscript{e}</td>
</tr>
<tr>
<td>Barnwell, South Carolina</td>
<td>1971 - present</td>
<td>Tritium in groundwater \textsuperscript{f}</td>
</tr>
</tbody>
</table>

Sources:
(b) NRC, EPA, and State of Kentucky studies from 1975-1996. ibid. Quoted in 40-42
(e) State of Illinois study from 1982. supra note (a) Quoted in 43.

---

**DECEPTION FROM SO-CALLED LOW LEVEL NUCLEAR WASTE**

The deception evident with respect to so-called low-level nuclear waste is startling, considering how many consumers view nuclear waste as a top priority (see Deception from Ignoring Highly Irradiated Nuclear Waste). The nuclear power industry ignores low level waste, and not a single dump exists that will completely isolate these dangerous radionuclides.

**SPECIES DESTRUCTION**

The destruction of aquatic life is of great concern when operating nuclear power plants. For example, the Brunswick nuclear plant in North Carolina has been estimated to destroy 46% to 99% of the larvae and 66% of juvenile fish in the Cape Fear Estuary, according to the U.S. Environmental Protection Agency. A 3.07 million pound reduction of spot, croaker, trout and shrimp was also estimated.\textsuperscript{20} The Salem nuclear plant in New Jersey is estimated to reduce weakfish by 11% the and reduce the bay

---

anchovy by 31% every year.\footnote[21]{Pace University Center for Environmental Studies. Environmental Costs of Electricity 1991. 287.} In the three full years from 1993 to 1996 the Seabrook nuclear plant in New Hampshire recovered 18 intact seal carcasses, all of which were Harbor Seals, from their intake structure.\footnote[22]{Seabrook Station’s Marine Mammal Protection Act Small Take Permit Application. June 13, 1997. Table 1. T1.} The remains of 15 other seals, including the Harbor Seal, the Harp Seal, and possibly others that could not be identified by the cranial remains at the site have been recovered.\footnote[23]{\textit{ibid} Table 2. T2-T5.} Through the plant’s first six plus years of operation (1990-5/97), between 27 and 33 seal entrapments occurred.\footnote[24]{\textit{ibid}. Table 3. 27-33.} Studies on the San Onofre nuclear plant in California by the California Coastal Commission has highlighted major aquatic concerns. This plant has killed 20 tons of fish in the intake system every year from 1975 to 1989.\footnote[25]{Final Report of The Marine Review Committee to the California Coastal Commission, August 1989, MRC Doc. No. 89-02. at 1.} The destruction of whitefish and croaker occurs at a rate of 500 metric tons annually from the operation of the plant.\footnote[26]{California Coastal Commission. Findings Regarding Permit Amendment. Appendix G.}

Unfortunately, nuclear power has directly contributed to the taking (harassment, harm or death) of thousands of animals listed as endangered and threatened. The largest direct impact has been on aquatic species, especially sea turtles. When examining nuclear power’s impact on endangered species, two nuclear power plants stand out as having particulary destructive impacts. The Salem nuclear power plant has documented 41 deaths of such animals among 99 takes. The endangered species taken were short nose sturgeon and loggerhead, green and Kemp’s ridley sea turtles.\footnote[27]{National Marine Fisheries Service. 1993 Biological Consultation and Incidental Take Permit.}\footnote[28]{1994 Summary of Impingements. Jan 9, 1995} Worse yet, the St. Lucie nuclear power plant in Florida has documented 4,132 takes, with 187 of those being lethal. The endangered species taken were loggerhead, green, Kemp’s ridley, leatherback and hawkbill sea turtles.\footnote[29]{National Marine Fisheries Service. 1997 Biological Opinion.}

\textbf{Deception from Species Destruction}
Deception from the advertisements is certain because of consumers attitudes about electric utilities and their destruction of species. A clear 85% of the public expects electric companies to care about species destruction. The importance of this issue to the consumer impacts their purchasing decision. Thus the failure to disclose important information will alter a consumer’s purchasing decision To place an advertisement that touts nuclear power’s environmental benefits while ignoring this environmental concern is deceptive.

**WATER POLLUTION**
Nuclear power plants require large quantities of water to provide a medium that transfers heat. Much of this heated water is discharged into the original body of water, leading to a range of negative environmental impacts. There are 30 nuclear power plants that have once-through cooling systems (the water is returned to its source considerably above the original temperature). The list of these negative impacts include destroying vegetation, causing nitrogen embolisms, oxygen depletion, and leaving fish subject to cold shocks when facility operation is interrupted. An excellent example of these effects can be found at the San Onofre nuclear plant. This plant has killed 20 tons of fish in the intake system every year from 1975 to 1989. The populations of many organisms have been drastically reduced by turbid waters that reduce the level of light and increase the flow of particles. These effects can be seen, for example, in the reduction of 13 species of snails, a 30% to 90% reduction in the white sea urchin, and significant negative effects on kelp beds.

---

30 supra note 8 at 5-6.


32 supra note 21 at 281.

33 supra note 25 at 1.

34 ibid. at 2, 8.

35 ibid. at 8.
Deception from Water Pollution
Deception from the advertisements is certain because of consumers attitudes about electric utilities and their water pollution. A clear 86% of the public expects electric companies to care about water pollution they create. When ranked against other environmental concerns, water pollution ranks third. The importance of this issue to the consumer impacts their purchasing decision. Thus the failure to disclose important information will alter a consumer's purchasing decision. To place an advertisement that touts nuclear power's environmental benefits while ignoring this environmental concern is deceptive.

Future Advertisements
Please note that in the Example 4, FTC suggests rephrasing the statement to include an appropriate qualification, thus removing the deception. However, we believe that the NEI cannot suggest in future advertisements that nuclear power emits substantially less greenhouse gases, because while that statement may be accurate it is still deceptive in that nuclear power is directly related to many other serious environmental problems. Consumers should not be deceived into believing that nuclear power is environmentally superior than other electricity sources merely because its pollution consists of radionuclides rather than NO\textsubscript{x} and SO\textsubscript{x}.

NEI’s Advertisements Clearly Deceive Consumers by Making Overly Broad Environmental Claims
The Guides (16 CFR Part 260.7.a) also provide that broad environmental claims should either be avoided or qualified, provided that the claims cannot be substantiated. Below, two examples have been compared to the advertisements to illustrate this point.

The Misleading Advertisements
The advertisements include statements that clearly fall into this category of broad claims that cannot be substantiated:

1. Environmentally Clean@1998)

2. Clean Electricity@1998)

\footnote{supra note 8 at 5-6.}
Example 2: A product wrapper is printed with the claim "Environmentally Friendly." Textual comments on the wrapper explain that the wrapper is "Environmentally Friendly because it was not chlorine bleached, a process that has been shown to create harmful substances." The wrapper was, in fact, not bleached with chlorine. However, the production of the wrapper now creates and releases to the environment significant quantities of other harmful substances. Since consumers are likely to interpret the "Environmentally Friendly" claim, in combination with the textual explanation, to mean that no significant harmful substances are currently released to the environment, the "Environmentally Friendly" claim would be deceptive.

As illustrated by Example 2, advertisements that make broad claims followed by more specific claims must not deceive the consumer. Thus, even if the NEI phrases without polluting air or water and nuclear power ... [doesn't] pollute the air were true, combining those phrases with clean electricity and environmentally clean, respectively, would be deceptive.

Example 3: A pump spray product is labeled "environmentally safe." Most of the product's active ingredients consist of volatile organic compounds (VOCs) that may cause smog by contributing to ground-level ozone formation. The claim is deceptive because, absent further qualification, it is likely to convey to consumers that use of the product will not result in air pollution or other harm to the environment.

As illustrated by Example 3, advertisements that make broad claims without qualifying other concerns must not deceive the consumer. Thus, the clean electricity and environmentally clean phrases must be followed by a disclosure of the areas of concern outlined in the previous sections.

The advertisements in 1999 also include statements that clearly fall into this category of broad claims that cannot be substantiated. It is clear that NEI continues to use overly broad claims in its advertising with no end in sight.

1. Healthy Air (1999)
2. **A*Fresh Air@ (1999)**

3. **A*Blue Sky@ (1999)**

**Deception from Overly Broad Environmental Claims**

The NEI advertisements deceive consumers by ignoring the environmental impacts of nuclear power. The terms *A*clean@ and *A*pollution@ have been given new meaning with these advertisements. Environmentally superior technologies such as wind and solar power cannot emerge in a newly competitive market if their distinction as an environmental product is erased by greenwashing. As noted throughout this complaint, consumers will use environmental attributes to make consumer purchasing decisions of electricity. Vague environmental terms only add to the deception.

**Consumer Deception is Irrefutable**

Consumer deception resulting from the NEI advertisements can be clearly demonstrated. A large and active competitive retail electricity market has emerged, and the fact that this market is relatively new increases the danger to consumers. The advertisements directly correlate to criteria deemed important to the consumers within this new market. This suggests that the advertisements were designed to influence consumers.

**Consumer Choice Exists Today**

Five states now have deregulated electricity markets where consumers can choose their supplier. The total number of consumers in these deregulated markets number almost 20 million. As of May 22, 1999, 21 states have passed either a law or an administrative proceeding to create open electricity markets which allow consumers to shop for their electricity supplier. The total population of these 21

---

37 Consumer choice is available in CA to 75% of the consumers (9,375,000), PA to 66% of the consumers (3,432,000), MA to 100% of the consumers except those served by municipalities (6,118,000), RI to 100% of the consumers (990,000), and NY to about 65,000 of the consumers.

38 States that have passed deregulation laws: Arizona, California, Connecticut, Delaware, Illinois, Maine,
states is more than 149 million consumers.\textsuperscript{39} Florida and South Dakota are the only states not considering any action to open their electricity market to competition.

**New Markets Require Extra Consumer Protections**

We contend that deception in a new market is far more damaging than deception in a mature market. Consumers have little knowledge of the environmental impacts of electricity generation by any source because they have had no choice of suppliers, thus no incentive to acquire this information. Allowing them to be deceived now may cause lasting impacts.

Few, if any consumers, would believe an ad that stated \textit{soft drinks are an important part of your daily nutrition.} Soft drink consumers, buyers in a relatively mature market, do not buy soft drinks for health purposes. The same cannot be said for buyers in an emerging electricity market. Consumers have little knowledge on which to base purchasing decisions and are therefore more vulnerable to misleading advertising. Strong actions must be taken to send a message to marketers that consumers will be protected from greenwashing.

**Consumer Criteria for Electricity**

Surveys consistently point to three criteria important to consumers in making a decision on an electricity supplier. The criteria are price, reliability and environmental impacts of the electricity supplied.\textsuperscript{40} In focus groups, these same three perceptions were found again.\textsuperscript{41} The quote below from the National Council on Competition and the Electric Industry illustrates the importance of these three perceptions.

When creating information campaigns for consumers about deregulation and choice, results of this survey indicate that suppliers need to emphasize the reliability of their service, the price, and impact on the environment. Six in ten consumers say information about reliability would be very useful to them when making a choice about an electricity supplier. Price information would be very useful to a majority of consumers (51%). Similarly, information about the environmental impact would be very useful to nearly half of the consumers (49%).\textsuperscript{42}

---

\textsuperscript{39} See www.infoplease.com/ 1997 estimates.

\textsuperscript{40} supra note 8 at 5.


\textsuperscript{42} supra note 8 at 11-12.
The NEI's advertisements are intended to deceive consumers by highlighting each of the criteria from above. The advertisements, which argue that nuclear power excels in all three criteria, make the following broad claims:

![Reliable, Proven, Environmentally Clean, Economical, Clean Electricity]

Each of the claims above are an attempt to deceive consumers by employing broad statements that directly correlate to the consumers criteria previously listed. This correlation provides ample evidence of the intent to deceive the consumer.

**Environmental Perceptions of Electricity**

Most consumers incorrectly believe that electricity is relatively clean.\(^{43}\) Most consumers also correctly believe that coal and nuclear power are not clean sources of energy.\(^{44}\) This suggests that consumer perceptions are based on limited knowledge about the generation of electricity, as coal and nuclear power deliver a total of 75% of the electricity in the U.S.\(^{45}\) In addition, most consumers downplay the environmental effects of electricity generation as compared to other pollution sources.\(^{46}\) In fact, electricity production overall is one of the largest sources of pollution in the nation.\(^{47}\)

When consumers are asked to rank fuel sources on a 1 to 5 scale (with 1 meaning they do not like the fuel source and 5 meaning they like the fuel source), they consistently base their rankings on their perceptions about the environmental impacts. This is established by another 1 to 5 ranking (with 1 meaning very harmful to the environment and 5 meaning not harmful to the environment) (See Table 1). The results are very clear in suggesting that the environmental impacts are critical in consumer decision-making.

---

\(^{43}\) supra note 1 at xxix.

\(^{44}\) ibid xxxi.

\(^{45}\) ibid xxix.

\(^{46}\) supra note 8 at 6.

making. Consumers correctly perceive that solar has the fewest environmental impacts (environmental impact score of 4.44), whereas consumers perceive coal (2.40) and nuclear (2.27) as being the most harmful. Their Energy Source Preference scores are directly correlated with solar (4.26) having a significantly higher preference over coal (2.29) and nuclear (2.22).
<table>
<thead>
<tr>
<th>Source</th>
<th>Energy Source Preference Score</th>
<th>Environmental Impact Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solar</td>
<td>4.26</td>
<td>4.44</td>
</tr>
<tr>
<td>Coal</td>
<td>2.29</td>
<td>2.40</td>
</tr>
<tr>
<td>Oil</td>
<td>2.57</td>
<td>2.42</td>
</tr>
<tr>
<td>Natural gas</td>
<td>3.72</td>
<td>3.33</td>
</tr>
<tr>
<td>Nuclear</td>
<td>2.22</td>
<td>2.27</td>
</tr>
<tr>
<td>Hydro-electric</td>
<td>3.87</td>
<td>3.69</td>
</tr>
<tr>
<td>Wind</td>
<td>3.97</td>
<td>4.28</td>
</tr>
<tr>
<td>Waste-to-energy</td>
<td>3.36</td>
<td>3.32</td>
</tr>
<tr>
<td>Wood or other bio-mass</td>
<td>2.75</td>
<td>2.74</td>
</tr>
<tr>
<td>Geo-thermal</td>
<td>3.38</td>
<td>3.43</td>
</tr>
</tbody>
</table>

Note: Ranking are based on scale from 1 to 5

1 = do not like
5 = like
1 = very harmful
5 = not harmful

Source: supra note 8 at 9. Table 3.

Responding to another set of questions, 82% of consumers believe that the environmental impacts of an energy source are a very important reason for liking or disliking an energy source. This compares to the 65% who believe that price is important when comparing sources and only 45% who believe that the source, foreign or domestic, is important.  

Finally, when the notion of deregulation and choice are introduced, seven out of ten consumers believe that they could affect the amount of pollution created by choosing suppliers with clean production methods. If marketers are going to imply that their product is environmentally preferable, then consumers will purchase it believing they are affecting the amount of pollution emitted.

---

48 supra note 8 at 9.

49 ibid at 11.
PUBLICATIONS THAT RAN NEI ADVERTISEMENTS

Many of the publications which have run the NEI advertisements reach a general nationwide audience. They have a combined circulation of greater than 1.5 million readers. At least one of the advertisements in question has run in each of the following publications:

<table>
<thead>
<tr>
<th>National Publications with a General Audience</th>
<th>Circulation</th>
</tr>
</thead>
<tbody>
<tr>
<td>The New York Times (national edition- weekdays)</td>
<td>277,402&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
<tr>
<td>The Washington Post (national weekly edition)</td>
<td>162,000&lt;sup&gt;b&lt;/sup&gt;</td>
</tr>
<tr>
<td>Barron’s</td>
<td>297,788</td>
</tr>
<tr>
<td>The New Republic</td>
<td>100,000</td>
</tr>
<tr>
<td>The Economist</td>
<td>300,000&lt;sup&gt;c&lt;/sup&gt;</td>
</tr>
<tr>
<td>Time Magazine</td>
<td>4,500,000</td>
</tr>
<tr>
<td>Atlantic Monthly</td>
<td>450,000</td>
</tr>
<tr>
<td><strong>Total Circulation</strong></td>
<td><strong>6,087,190</strong></td>
</tr>
</tbody>
</table>


Sources: All numbers from *New Media Yellow Book*. Leadership Directories Inc. Winter 1998, unless noted below.

<sup>a</sup> New York Times Marketing Department. Washington D.C.
<sup>c</sup> Economist. New York Office.

All indications are that the NEI plans to continue this deceptive campaign. Three rounds of advertisements have been placed, the third occurring last month. A *Wall Street Journal* article states that the NEI intends to place more advertisements in the next two years.<sup>50</sup>

GREENWASHING IS DECEPTIVE REGARDLESS OF THE ENERGY FORM

---

Our concern in protecting consumers from greenwashing electricity products can be applied to all the mature energy markets that exist today: coal, nuclear, oil, natural gas, and hydroelectric. For example, electricity from coal comprises 55% of the market for electricity production while pumping massive amounts of greenhouse gas and acid rain emissions into the air. However, recent clean coal technologies have become available that reduce the emissions. If a coal marketer were to suggest that the electricity produced by a clean coal technology was environmentally friendly, deception is quite likely. Clean coal technologies still emit significant air pollutants, and we would oppose such an advertisement. A more radical comparison would be a coal advertisement suggesting that coal is environmentally friendly because it does not create radioactive waste and the coal power plant cannot melt down and release massive quantities of radiation. While this statement is true, coal marketers cannot ignore other environmental impacts in attempts to greenwash their electricity.

**OTHER CONSUMER PROTECTION AGENCIES HAVE OBJECTED TO THESE AND SIMILAR ADVERTISEMENTS IN THE PAST**

**Better Business Bureau**

In December of 1998, the Better Business Bureau (BBB) National Advertising Division (NAD) issued a decision on a complaint by 15 organizations who charged NEI with false advertising based on their 1998 advertising campaign. They conclude that the advertisements in question are commercial speech and the environmental claims are problematic and inaccurate. They conclude:

> The deregulation of the energy industry has opened up a new, potentially huge direct-to-consumer market for power companies. In this new free market atmosphere, consumers are likely to be bombarded by advertisements in which various energy providers attempt to distinguish themselves from their competition, sometimes on the basis on environmental impact. Because of the complexity of the issues regarding energy, and because consumers cannot, as a general rule, judge the truthfulness and accuracy of environmental claims for themselves, energy advertising should be substantive and specific as possible and avoid overly broad or vague environmental claims. Consumers who are concerned about the environment need accurate, clear environmental information in order to make meaningful comparisons and to enable them to choose the energy provider that best addresses their concerns.

> ... NAD recommends that water and air pollution claims be carefully qualified to avoid any potential for consumer confusion and that broad, unqualified claims that nuclear energy is Environmentally Clean or produces electricity without polluting the environment be discontinued.

In response to a 1999 NEI advertisement, the BBB has now forwarded their concerns to the FTC asking for a review of these advertisements. We concur that a FTC review is necessary.

**State of Maine Department of the Attorney General**
In September 1996, Maine Yankee Atomic Power Co., which owns the Maine Yankee nuclear reactor, ran a commercial to influence public opinion stating *Our plant, unlike some others, produces no air or water pollution.* After a local environmental group filed a complaint, the State of Maine Department of the Attorney General concluded:

> While the operation of a nuclear power plant is subject of federal and not state regulation, we would have to agree with you that this particular statement is inaccurate. Maine Yankee emits both air and water pollution, as well as creating both low level and high level nuclear waste, as it is licensed to do so by the federal Nuclear Regulatory Commission.

> In sum, regardless of whether this case might technically make out a consumer fraud under State law, we do concur with the conclusion that the advertised statement in question is incorrect and should not be used. Maine Yankee agrees with this conclusion and has withdrawn these advertisements.\(^{51}\)

**CONCLUSION**

We believe that the NEI advertisements are deceiving consumers and that they were designed to deceive consumers. Failure for the FTC to prohibit such advertisements in the future will contribute to the greenwashing of the electricity market. Therefore, we reiterate our demand for the FTC to prohibit further use of any NEI advertisement that mislead consumers.

Sincerely,

Auke Piersma
Energy Policy Analyst
Public Citizen\=Critical Mass Energy Project

on behalf of:
Citizen Action Coalition of Indiana
Nuclear Information and Resource Service
Safe Energy Communication Council
U.S. Public Interest Research Group

\(^{51}\)State of Maine. Department of the Attorney General. Letter to Anne D. Burt from Jeff Pidot, Chief, Natural Resources Division. September 17, 1996