

# Flow Chart<sup>1</sup> of the Final Round: Connecticut Debate Association

## Darien High School

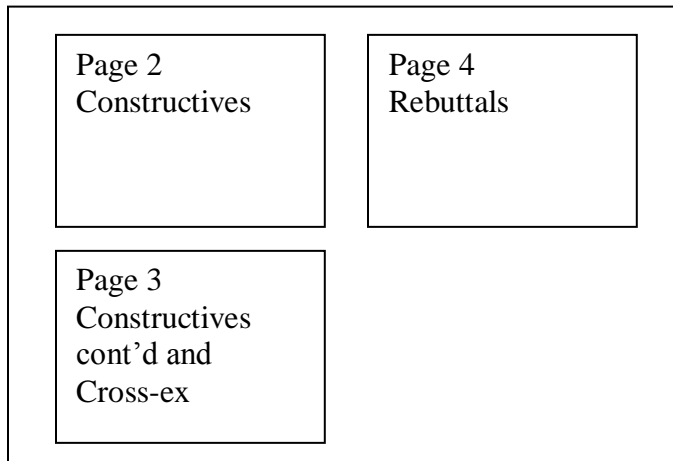
March 3, 2007

**Resolved: The U.S. should actively pursue development and expansion of its nuclear power facilities.**

The final round was between Hamden (Hannah Grigg and Nicolas Gauthier) on the Affirmative and Newtown (Akshay Agashe and Gavin Newton-Tanzer) on the Negative. The debate was won by Hamden.

### Format Key

It's hard to reproduce notes taken on an 11" by 14" artist pad on printed paper. The three pages below are an attempt to do so. The first page covers the constructive speeches, the second page covers the cross-ex, and the third page covers the rebuttal. The pages are intended to be arranged as follows, which is how my actual flow chart is arranged:



Note that the first page containing the constructive speeches always has arguments related to the Affirmative contentions at the top, and those relating to the Negative contentions at the bottom. This is not how the speeches may have been presented, in that often a speaker will deal with Negative arguments prior to the Affirmative. The “transcript” version of this chart presents the arguments in each speech as presented.

The chart uses “A1,” “N2,” etc. to refer to the Affirmative first contention, the Negative second contention and so forth. It also uses the following abbreviations:

“NP” Nuclear power

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First Affirmative Constructive	First Negative Constructive	Second Affirmative Constructive	Second Negative Constructive
1) Introduction 2) Statement of the Resolution 3) Define “actively pursue development and expansion” as increasing funding for research, development and implementation 4) A1 <sup>2</sup> : Nuclear power (“NP” <sup>3</sup> ) is a viable energy source a) In Connecticut, we have 2 NP stations supplying 53% of our electricity b) NP is two times as efficient as coal, and becoming less expensive i) A family of four needs 50 tons of coal versus a soda can of uranium 5) A2: Nuclear power is a safe and clean alternative a) Chernobyl was due to a mistaken experiment, not safety problems i) No similar accident has ever occurred in the US ii) No similar disaster has occurred anywhere in the years since Chernobyl b) Three Mile Island (“TMI”) safety systems prevented fatalities c) NP is environmentally friendly versus coal i) Coal burning releases 1 ton of CO <sub>2</sub> every 30 seconds d) Nuclear waste can be dealt with through reprocessing and burial i) Yucca facility can confine nuclear waste safely ii) Coal burning causes cancer and birth defects, releasing mercury and radiation 6) A3: Nuclear power will make us less dependent on hostile sources of energy. a) Oil is imported, from many countries in the Middle East i) It provides a weapon they can use against us if supplies are cut off ii) Uranium can be obtained from the US, Canada and Australia	1) Introduction 2) Statement of the resolution 3) “Should” implies an obligation to act. a) You cannot impose on someone an obligation to do the impossible b) If we can show the Affirmative proposal is impossible, we will have negated the resolution. 4) “Pursue” means to take action	1) Introduction 2) A1: Research and development will improve the safety and efficiency of NP a) Fusion power might be developed 3) A2: The safety of NP can be seen when compared to coal a) Coal puts mercury and uranium into the air b) Coal results in twice the radioactivity of NP 4) A3: Oil and coal are currently our major sources of power a) Coal pollutes, oil makes us dependent on hostile countries	1) Introduction 2) Definition: “pursue” means more than spending money; it requires the government use all their resources a) The Affirmative is not upholding the resolution 3) A1: If NP were viable, you wouldn’t need government money a) Consumers can get whatever they want. i) If they want tasty cookies, they will get tasty cookies ii) If they wanted NP, we would already have NP b) NP requires multiple resources i) New facilities to process ore ii) Need to import uranium as there is not enough in New Mexico iii) Trained staff for refining iv) New power grid to transport the power produced c) There are alternatives to NP i) Only rich countries can afford NP, not poor countries like Kenya ii) If we want a global energy solution, we need wind and solar power 4) A2: Human error will always exist a) There is no reason a mistake won’t happen again, especially with all the new personnel that have to be trained b) Communism sounds like a good idea in theory but doesn’t work in practice i) Relying on NP is the same thing c) Fusion doesn’t exist d) Why not move to hydrogen fuel or lean up coal i) The Affirmative plan will not eliminate our reliance on coal 5) A3: Cars don’t use NP a) There will still be pollution and an energy crisis b) Dependence on foreign powers is good as it forces us to realize that we are not a hegemonic power
	1) N1: The costs of NP outweigh the benefits a) The government has finite resources i) Funds will have to be taken from other problems, such as the war in Iraq or repairing the damage of Hurricane Katrina ii) Spending on NP will mask other	1) N1: Affirmative agrees there will be increased costs in the short-term a) Ultimately, there will be fewer power plants than coal b) Eventually the costs will be lower 2) N2: There will be no great sea change in our power sources	

<sup>2</sup> “A1” indicates the Affirmative first contentions, “N2” the Negative second contention and so forth.

<sup>3</sup> This introduces “NP” as an abbreviation for nuclear power in the remainder of these notes

	<p>problems such as AIDS</p> <p>b) Ultimately the spending will have to be funded by taxes</p> <p>2) N2: It is impossible to pursue the development and expansion of NP</p> <p>a) There is a limited supply of uranium</p> <p>i) 30% is in Australia and they need it all themselves</p> <p>ii) Not enough to pursue NP as a major source of power</p> <p>b) NP requires a supply of skilled professionals</p> <p>c) Uranium is rare and there are hidden costs to finding it</p> <p>3) N3: It is unsafe to pursue such a goal</p> <p>a) NP is inherently unsafe</p> <p>i) Chernobyl shows the possibility of harm</p> <p>ii) Long-term risks outweigh the benefits</p> <p>b) NP can be used to breed weapons in the wrong hands</p> <p>i) Even getting US research information can be dangerous</p> <p>c) Nuclear waste destroys the environment as it is not biodegradable</p> <p>4) N4: In pursuing NP the US sets up a double standard</p> <p>a) US can't tell others not to pursue NP if it is doing it itself</p>	<p>a) Gradually the energy budget will change, less oil and coal, more NP</p> <p>b) We will shift money that would be used for those energy sources</p> <p>3) N3 clashes with A2</p> <p>a) We are enriching uranium for power, not weapons</p> <p>i) Power grade is 5%, weapons grade is 95%</p> <p>b) Environmental costs will be less than coal and is CO2</p> <p>c) Safety standards can be enforced and improved</p> <p>4) N4: Whether or not we increase funding doesn't change the facts</p> <p>a) 20% of our power comes from NP</p> <p>b) We have a stockpile of nuclear weapons</p> <p>c) Any double standard already exists and the resolution doesn't change this</p>	
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Cross-ex of First Affirmative	Cross-ex of First Negative	Cross-ex of Second Affirmative	Cross-ex of Second Negative
<p>1) You want the government to pursue NP? They should try for more NP as a goal</p> <p>2) The government's obligation consists of? Spending more on NP.</p> <p>3) When should we take action to implement NP? When it's needed.</p> <p>4) So NP is the course we should take? Yes</p> <p>5) How much will it rectify the energy crisis? I will alleviate it</p> <p>6) Will it supply the entire nation? Some of it</p> <p>7) Will use of coal disappear? No</p> <p>8) Will there be nuclear powered cars? I'm not aware of them.</p> <p>9) So we will still need gasoline? Yes</p> <p>10) Why can't we use alternate energy sources? Most of these can't provide energy in the same amounts as NP.</p> <p>11) How long will it take to get NP? We have many nuclear power plants already</p> <p>12) How long will it take to get benefits from your program? We can start now</p> <p>13) But how long will it take to get benefits? We will benefit right away</p>	<p>1) Do they drill for oil off the Gulf Coast? Yes</p> <p>2) Doesn't that show that they can obtain resources from under water? You can't pump out uranium, you have to isolate it.</p> <p>3) If it is impossible to pursue the resolution, how do you explain that NP provides 20% of the US electricity? There is no evidence more is possible, and in any case you could use alternatives.</p> <p>4) Are you implying you could get rid of NP now? We don't want to pursue more, especially since that would be a double standard.</p>	<p>1) Does fusion power exist? It's in the research and development stage</p> <p>2) Why can't the research funds be spent on alternative energy sources? Fission is safe, fusion could be more efficient, and they are safer than coal</p> <p>3) Do people like tasty cookies? What?</p> <p>4) If there are viable alternatives, isn't better to pursue them? NP is the only viable major source of power</p> <p>5) Doesn't the viability of the sources negate the resolution? No</p> <p>6) Does the negative have the burden of proof? It's your job to show these sources are viable if you want to argue that.</p> <p>7) Where will the funding come from? The government's energy budget.</p> <p>8) How much is needed? We don't have an exact figure</p> <p>9) Is it good to protect the environment? Yes, that's why NP is better than coal.</p> <p>10) How is NP less polluting? It doesn't release pollutants as it produces energy.</p>	<p>1) Can you give me some examples of alternative energy? Coal, hydrogen, solar, wind water</p> <p>2) Are they viable for the entire country? They are all viable. You're the one talking about fusion</p> <p>3) So we could all switch to wind power? NP is not feasible. We could research hydrogen for future use.</p> <p>4) How can NP be impossible if it is successful now? Building more plants requires money and installations</p> <p>5) How can it be impossible if it's already done? It's not impossible in some situations, just on the scale proposed by the Affirmative</p>

First Affirmative Rebuttal	First Negative Rebuttal	Second Negative Rebuttal	Second Affirmative Rebuttal
<p>1) We are “pursuing” in the Affirmative sense in that government funds would be spend on all of these things—research, hiring, training, building and so forth</p> <p>2) A3: It isn’t good to rely on foreign powers</p> <p>a) Canada is nearby and it and Australia are our friends</p> <p>b) Oil powers can cut off oil, the Middle East is hostile to us</p> <p>c) The Negative says that there will still be an energy crisis</p> <p>i) But NP is the most viable means of alleviating it</p> <p>ii) NP may not solve the issue, but will have more impact than any other energy source</p> <p>iii) We can continue to work on alternatives when they become viable</p> <p>d) The Negative says NP is infeasible</p> <p>i) The US has 100 nuclear plants already that must have the staff to operate</p> <p>ii) No reason we couldn’t staff more</p> <p>3) N3: Coal is unsafe too</p> <p>a) Nothing is entirely safe</p> <p>b) NP has many safeguards</p>	<p>1) I will review the Negative arguments and my partner will review the Affirmative</p> <p>2) The Negative noted that “should” obligation must be possible</p> <p>a) You can’t pursue NP on a scale needed to get the Affirmative benefits</p> <p>3) The Affirmative must show you that the government must take a role</p> <p>a) The Affirmative can’t simply argue the benefits of NP on its own</p> <p>4) N1: There are multiple alternatives preferable to pursuing NP alone</p> <p>a) Alternatives do the same thing as NP</p> <p>b) We can fund hydrogen power and fuel cells</p> <p>5) N2: The Affirmative can’t show we can implement NP on sufficient scale</p> <p>a) It would require too many professionals and there isn’t enough uranium</p> <p>6) N3: Safety not certain</p> <p>a) The research could be used to develop weapons</p>	<p>1) NP is no more stable than I am</p> <p>2) New arguments are not permitted in rebuttal</p> <p>3) Affirmative has the burden of proof</p> <p>4) A1: No reason to pursue NP as consumers could get NP if they wanted NP</p> <p>a) Need to show NP is feasible</p> <p>i) Not enough facilities</p> <p>ii) Have to import uranium</p> <p>iii) Not enough staff for program</p> <p>b) New staff would have to be trained</p> <p>i) Errors would be more likely</p> <p>c) To solve the energy crisis, we have to look beyond the US</p> <p>i) We need something like windmills we can ship abroad</p> <p>5) A2: This argument is purely theoretical</p> <p>a) No reason to believe it will exist</p> <p>b) Affirmative would have to show it could be done</p> <p>c) We could take the same money and fix coal</p> <p>6) A3: NP is not sufficient to get rid of coal, oil and gas</p> <p>a) The Negative believes dependence on foreigners is good.</p>	<p>1) N1: The money we need comes from the US energy budget as a whole</p> <p>a) The alternatives proposed by the Negative require money</p> <p>b) NP is a more effective alternative with immediate results</p> <p>2) N2: We have 100 plants in the US producing 20% of our electricity</p> <p>a) France produces 80% of its electricity using NP</p> <p>b) What the Affirmative is proposing has been done</p> <p>3) N3 vs A2: Safeguards can protect us from radioactivity</p> <p>a) NP is safer than coal</p> <p>b) There are more safeguards for NP than for coal</p> <p>4) N4: The double standard already exists, and will not be worsened</p> <p>5) A1: NP is twice as effective as coal</p> <p>a) The Negative argument ignores the side effects of coal</p> <p>6) A2: NP is cleaner and safer than what is now in use</p> <p>7) A3: Even if we replace a small percent of our energy, it makes us less dependent</p> <p>8) NP is something that we should do.</p>