

## ES 106 TOWN MEETING ACTIVITY

### Introduction

In our modern society, at least in America, most of the aspects of our daily lives are governed by decisions that are made by a few individuals but are based on the consensus of a larger group. Every community, from the smallest village to the largest metropolis, sets current standards and future goals on such informed decisions. In a broader sense, decisions made on the local level can have an impact on the larger global community. To become more actively involved in decisions which affect the local and global community, you as an individual must make informed decisions on many issues.

During the course of this term, we have been examining not only Earth science, but we have also been discussing several impacts that humans have made upon the Earth system. Many of these stem from the use and abuse of Energy resources. The goals of the Town Meeting Assignment are to research a topic or issue related to Earth Science and to encourage students to take a more active role in the decision-making process that affects their community, the nation, and the world.

### **The Issue: Economic Expansion and Energy Production Alternatives**

Suppose you live in a growing urban area like Portland. The city has been experiencing a rapid growth in both industry and population over the last 10 years, and there is no predicted end in sight. City, state, and federal government studies have shown that the energy sources that are currently in operation are presently working at the maximum output that could be expected of them. On top of this, those same energy sources are rapidly aging and will soon need major upgrading and repair. The community must consider issues such as construction and maintenance of new and/or alternative energy sources, fuel availability and cost, environmental pollution, health risks, and benefits from economic expansion. The city of Portland is now considering alternative solutions to the problem, and various interest groups in the city have criteria and agendas that they feel must be met. The Town Meeting has been called to allow the various interest groups to present their arguments and solutions relating to the problem in an open forum.

**Organization**

1. The class will be divided into groups of 3-4 students.
2. Each student group will represent a portion of the community, and each group will have its own unique set of goals, values, points of view, economic background and interests, etc.
3. The student groups will research the topic *independently* from their own personal point of view.

**Group 1** - Power company wants to open and run a fossil-fuel burning power plant in the Portland area. Group represents fossil fuel interests.

**Group 2** - Coalition of environmentalists and health care workers who are against the expanded and continued use of fossil fuels.

**Group 3** - Power company wants to build a waste-to-power incineration plant in the Portland area.

**Group 4** - Coalition of environmentalists and local residents who are opposed to the waste-incineration plant.

**Group 5** - Power company wants to open and run a nuclear power plant in the Portland area. Group represents nuclear energy interests.

**Group 6** - Coalition of environmentalists and local residents who are opposed to the nuclear power plant. Group strongly opposed to nuclear energy.

**Group 7** - Group advocating alternative sources of energy production such as geothermal and hydrothermal.

**Group 8** - Group advocating alternative sources of energy production such as solar and wind power.

**Assessment:**

One or more of the following assessment devices may be used to evaluate the Town Hall Meeting assignment. Your lab instructor will provide additional information.

***The Group Presentation:*** The presentations will be organized in the format of a Town Hall Meeting. Each group of the community will have 7 minutes to present its case and then the floor will be opened for 3 minutes of open discussion. Each member of the group must participate in answering questions during the discussion. Individual grades for this portion will be based on the presentation and responses to the questions. Attendance is required!

***Written Report:*** Students will be responsible for writing an essay on the topic from the point of view of their particular group. This essay should be no more than **1** typed page (12 point font, double spaced). When preparing your essay, be sure to discuss any relevant scientific issues and use scientific data to back your arguments whenever possible; this is a science class not an opinion poll. Use lecture notes, the textbook, and outside reference sources to support your arguments. Cite the references within the text and include a list of references that you used at the end of the written report. This portion of the assignment will be graded on individuality, style, factual content, grammar, and spelling.

***Peer Review:*** Each member of the group will be evaluated by the other members of the group on participation and contribution. Each group will receive an evaluation of their presentation from the class. These will be tallied and added to your score.