

How Would You Spend \$14 Billion? Contest

For a Sustainable Tennessee Valley
Energy Efficiency Demand Response
Renewable Energy Carbon Reduction

Your Mission

TVA plans to spend \$14 billion to build Bellefonte, a two-unit nuclear plant in Northern Alabama.

Your mission, if you choose to accept it, is to describe in detail how \$14 billion-worth of energy efficiency, demand response, and renewable energy can meet and exceed what the two Bellefonte nuclear plants would produce (in both MW and GWh). You must use the design parameters stated below:

Bellefonte Design Parameters

(Two Units Combined)

2234 MW net capacity (90% reliability)

8,668 GWh annual generation

\$14 billion construction cost

Other Design Parameters

The planning area is the TVA Service area.

The planning time is from now to 2022.

The contest focuses on electricity only.

Feel free to use any strategy already used by another state or utility.

Do come up with your own ideas.

How Will Your Entry be Judged?

These are the Contest Questions!

How much have you reduced in GWh the annual TVA electricity sales by 2022?

How much have you reduced the TVA power demand (MW) by 2022?

How many kWh of annual renewable energy have you generated for TVA in 2022?

How many tons GHG emissions will your plan reduce by 2022 within the TVA service area as a percent of 2008 conditions?

What specific methods do you propose to obtain these savings and is your plan technically and economically feasible?

What is the cost of implementing each of your proposed methods, and how do you arrive at that estimate?

How many jobs will be created by implementing your plan, and how did you arrive at that estimate?

You entry will also be judged on the following:

- How clearly is your plan organized, written, and presented?
- How credible are the sources you used to make your calculation?
- How credible are the projections you have assumed?

How Would You Spend \$14 Billion Contest Rules

1. No entry fee is required. The Contest reserves the right to publish the winning entries and distribute them to decision makers and community leaders throughout the TVA service area. Full recognition of the applicant will be included. Submission of an entry constitutes an unlimited license to the Contest sponsors to reproduce and distribute an entry (including excerpts) without fee or permission.
2. All entries must be original works of the applicant, in English. Applicants must provide references for all quotes and information sources.
3. To be eligible, the submitted work must address the ten questions identified in this official contest announcement under the heading, ***How Will Your Entry be Judged?***
4. The maximum length is 6,000 words. In addition, up to 10 charts, spreadsheets, and graphs may be submitted with the text. Each illustration, spreadsheet, graph, chart, or graph, or graphical figure must have an explanatory title and/or caption describing in a few words the content of the figure and data reference. These figures may be imbedded within the text or attached to it at the end.
5. The Contest is open only to those living within the TVA service area who have not professionally designed or published an energy efficiency, demand response, renewable energy, or climate action plan. Individuals, groups (civic clubs, student associations and organizations, and other non-professional organizations), or classes (high school, college, university, technology centers) may enter. Members of the board, staff, or their immediate relatives of the sponsoring organizations are not eligible to participate.
6. Entries must be submitted as a PDF document to the email address listed in the announcement. The entry must be formatted to print on 8.5 by 11 inch paper, have no smaller than 0.75 inch margins, be double spaced, use a normal 12 point text font, and include page numbers. All other formats will be disqualified. Each entry must have a cover page with the title of the work, the contestant's name, affiliation (if any), address, telephone number, email address and word count. The title and date must also appear at the top of the first page of the work. The contestant's name and affiliation must not appear on this or on subsequent pages to facilitate fair judging. (We will assign a unique code to each entry and mask contestant identification on copies sent to our judges.)
7. There shall be three cash prizes: one First Prize of \$2,000, one Second Prize of \$1,000, and four Third Prizes of \$500 each, in U.S. dollars. All winners (individuals and/or groups) will also receive trophies or certificates. Groups that win a prize are considered as one contestant.
8. The Contest ends Earth Day 2009 - April 22, 2009. To be eligible for judging, an entry must be e-mailed no later than midnight (CT) on that day.
9. Each entrant may submit only one entry. All entries are final. No revisions will be accepted.
10. Entries will be judged by academics and professionals in the field of energy efficiency, demand response, and renewable energies. The decisions of the judges are entirely their own and are final.
11. Winners will be individually notified of the results by e-mail. Winners will be announced and awarded their prizes on Summer Solstice 2009.
12. This contest is void where prohibited by law.

FAQ Contest Information

Where to send entry: Send a PDF to lgorenflo@gmail.com

What are good sources of background information for this contest?

Alliance to Save Energy

American Council for an Energy-Efficient Economy (All the answers here. See *Report No. E073, Potential for Energy Efficiency, Demand Response, and On-site Renewable Energy to Meet Texas's Growing Electricity Needs* for a look at a state of the art study.)

Pew Center on Global Climate Change

American Solar Energy Society

National Sierra Club's *Cool Cities* project

SolarValleyCoalition.net - an archive of energy related documents

Do you expect me to do "original" research?

Others states and utilities are way ahead of our region, so feel free to learn from them. But be sure that you address the Tennessee Valley conditions. No published study like this for our region has been done, so your work in that sense will be original.

How will the contest results be used?

The winning entries will be shared with decision-makers within the TVA service area - regional, state, and local. Your research is important! It will help shape a sustainable energy future for our region.

Who are the judges?

Judges are college professors and professionals in the field of sustainable energy.

Who are the Contest Sponsors?

Bellefonte Efficiency and Sustainability Team (BEST)

Blue Ridge Environmental Defense

Solar Valley Coalition

Southern Alliance for Clean Energy

Tennessee Environmental Council

Tennessee Sierra Club

U.S. Green Building Council / Middle TN Chapter

Who can I contact for more information? *"Do contact me if you have questions. We want you to be a winner!"*

Louise Gorenflo, Contest coordinator: lgorenflo@gmail.com