

**To:** Office of Planning and Research  
 PO Box 3044, 1400 Tenth Street, Room 222  
 Sacramento, CA 95812-3044

**From:** California Energy Commission  
 1516 Ninth Street, MS-48  
 Sacramento, CA 95814

**Project Title:** Waste Vegetable Oil Driven CHP for Fast Food Restaurants

**Project Location – Specific:** 244 Sobrante Way

**Project Location – City:** Sunnyvale, CA      **Project Location – County:** Santa Clara

**Description of Project:**

Altex Technologies is leading several federally sponsored projects with partners ClearEdge Power (CEP), Dewey Electronics, and Penn State University in developing high-temperature polymer-electrolyte membrane (HTPEM) fuel cell power systems that operate on distillate fuels. The proposed work takes advantages of the expertise and experience that Altex and CEP have developed under these programs and CEP's commercialization efforts for 5-kWe home combined heat and power (CHP) systems to synergistically produce a waste vegetable-oil (WVO) fueled 4-kWe/45,000-BTU/hr CHP system based on Altex reforming technology and CEP HTPEM fuel cell technology. The proposed project aims to bring the cost of the WVO-fueled CHP system to a cost that allows for significant market penetration even if current incentives are rescinded. The market is large enough to overcome barriers to small-scale distributed generation (DG) technology by large-scale implementation of small-scale DG technology. This will produce significant grid reliability and emissions benefits for California ratepayers. The technology addresses AB 32 by utilizing a renewable waste stream as a fuel source for a reduction in net CO2 emissions.

**Name of Public Agency Approving Project:** California Energy Commission

**Name of Person or Agency Carrying Out Project:** Altex Technologies Corporation

**Exempt Status:** *(check one)*

- Ministerial (Sec. 21080(b)(1); 15268);
- Declared Emergency (Sec. 21080(b)(3); 15269(a));
- Emergency Project (Sec. 21080(b)(4); 15269(b)(c));
- Categorical Exemption. State type and section number 14 CCR 15329
- Statutory Exemptions. State code number. \_\_\_\_\_
- Common Sense Exemption. 15061(b)(3)

**Reasons why project is exempt:**

Class 29 - Installation of certain cogeneration equipment of less than 50 megawatts capacity at existing facilities.

1. 50 MW or less.

Yes, 5 kWe.

2. Results in no net increase in air emissions or will produce emissions lower than the amount that would require review under the new source review rules applicable in the county.

Yes, will meet the CARB 2007.

3. Comply with all applicable state, federal, and local air quality rules.

Yes. We are aiming towards commercial units, so we will work with CEP to make sure the product to meet all rules and regulations.

4. Result in no noticeable increase in noise to nearby residential structures.

Yes, the low noise is fuel cell distinct advantage.

5. Must be connected, next to, or part of the existing commercial or industrial structures.

It will be installed at a fast food restaurant and connected to its structure. Size is projected to be 20 cubic feet, about 2.5 by 2 by 4 ft, small enough (like a water heater) to fit the existing structures.

**Lead Agency**

**Contact Person:**     Jean Baronas          **Area code/Telephone/Ext:**     916-654-4512    

**If filed by applicant:**

1. Attach certified document of exemption finding.
2. Has a Notice of Exemption been filed by the public agency approving the project?       Yes       No

**Signature:** \_\_\_\_\_      **Date:** \_\_\_\_\_      **Title:** \_\_\_\_\_

**Signed by Lead Agency**

**Signed by Applicant**

**Date received for filing at OPR:** \_\_\_\_\_