



TETRA TECH EC, INC.

DOCKET

09-AFC-8

DATE MAR 10 2010

RECD. MAR 15 2010

March 12, 2010

California Energy Commission
Docket No. 09-AFC-8
1516 9th St.
Sacramento, CA 95814

Genesis Solar Energy Project - Docket Number 09-AFC-8

Docket Clerk:

Included with this letter is one hard copy and one electronic copy of the ***Application for Authority to Construct and Permit to Operate and Application for Gasoline Dispensing Facilities to the MDAQMD.***

Sincerely,

A handwritten signature in cursive script that reads "Emily Festger".

Emily Festger (for Tricia Bernhardt)
Project Manager/Tetra Tech EC

cc: Mike Monasmith /CEC Project Manager



143 Union Boulevard, Suite 1010, Lakewood, CO 80228-1875

Tel 303.988.2202 Fax 303.980.3539

www.tteci.com



TETRA TECH EC, INC.

March 10, 2010

Mr. Richard Wales
APCD Engineer
Mojave Desert Air Quality Management District
14306 Park Avenue
Victorville, CA 92392

Dear Mr. Wales:

On behalf of Genesis Solar, LLC, attached please find the following for the Genesis Solar Energy Project:

- Application for Authority to Construct and Permit to Operate
- Application for Gasoline Dispensing Facilities
- Gasoline Tank Emission Calculation
- Fixed Roof Tank Emission Calculation (Diesel Fuel – revised from the previous calculation to accommodate a 3,600 gal tank)
- Application fee of \$452.00 (\$226.00 per form)

Please feel free to contact me should you have any questions.

Sincerely,

A handwritten signature in blue ink that reads "Emily Festger".

Emily Festger (for Tricia Bernhardt)
Tetra Tech EC, Inc.

Cc: Meg Russell (Genesis Solar, LLC)
Mike Monosmith (California Energy Commission)

Attachment



MOJAVE DESERT AIR QUALITY MANAGEMENT DISTRICT


14306 Park Avenue, Victorville, CA 92392-2310
 (760) 245-1661 Facsimile: (760) 245-2022

www.mdaqmd.ca.gov
Eldon Heaston
 Executive Director

APPLICATION FOR AUTHORITY TO CONSTRUCT AND PERMIT TO OPERATE

Page 1 of 2: please type or print

REMIT \$226.00 WITH THIS DOCUMENT (\$129.00 FOR CHANGE OF OWNER)

1. Permit To Be Issued To (company name to receive permit): Genesis Solar, LLC		1a. Federal Tax ID No.: 35-2303285	
2. Mailing/Billing Address (for above company name): 700 Universe Blvd., Juno Beach, FL. 33408			
3. Facility or Business License Name (for equipment location): Genesis Solar Energy Project			
4. Facility Address - Location of Equipment (if same as for company, enter "Same"): Riverside County, Blythe, CA		Location UTM or Lat/Long: 33°38'5.39" N, 114°57'20.58"W	
5. Contact Name/Title: Duane McCloud		Email Address: duane.mccloud@nexteraenergy.com	Phone/Fax Nos.: (561) 694-3577
6. Application is hereby made for Authority To Construct (ATC) and Permit To Operate (PTO) the following equipment: 1-2000 gallon gasoline storage tank (see supplemental gas tank form)			
Air Pollution Control Equipment, if any (note that most APCE require a separate application): See AFC Air Quality section and Appendices for APCE details.			
7. Application is for: <input checked="" type="checkbox"/> New Construction <input type="checkbox"/> Modification* <input type="checkbox"/> Change of Owner*		For modification or change of owner: *Current Permit Number:	
8. Type of Organization (check one): <input type="checkbox"/> Individual Owner <input type="checkbox"/> Partnership <input checked="" type="checkbox"/> Corporation <input type="checkbox"/> Utility <input type="checkbox"/> Local Agency <input type="checkbox"/> State Agency <input type="checkbox"/> Federal Agency			
9. General Nature of Business: Solar Electric Power Generation		Principal Product: Electricity	SIC Code (if known):
10. Distances (feet and direction to closest): _____ Fenceline _____ Residence _____ Business _____ School See AFC for this data.			
11. Facility Annual Throughput by Quarters (percent): _____ % _____ % _____ % _____ % Jan-Mar Apr-Jun Jul-Sep Oct-Dec		12. Expected Facility Operating Hours: _____ _____ _____ _____ Hrs/Day Days/Wk Wks/Yr Total Hrs/Yr	
13. Do you claim Confidentiality of Data (if yes, state nature of data on reverse in Remarks)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			
14. Signature of Responsible Official: 		Official Title: Director	
Typed or Printed Name of Responsible Official: Scott A. Busa		Phone Number: (561) 691- 2889	Date Signed: 1-28-2010
- For District Use Only -			
Application Number:	Invoice Number:	Permit Number:	Company/Facility Number:

**MOJAVE DESERT AIR QUALITY MANAGEMENT DISTRICT
GENERAL APPLICATION, continued**

Page 2 of 2: please type or print

15. Stack Emissions Information:

<u>Stack No.</u>	<u>FT. agl Stack Height</u>	<u>FT. Stack Diameter</u>	<u>F deg Exhaust Temp</u>	<u>ACFM Exhaust Flow Rate</u>	<u>FT/SEC Exhaust Velocity</u>
1					
2					
3					
4					
additional stacks					
5					
6					
7					
8	See supplemental gas tank form.				
9					
10					
11					
12					

- 13
- 14
- 15
- 16
- 17
- 18
- 19
- 20
- 21
- 22
- 23
- 24
- 25

Stack Height is the distance above ground level to discharge point (feet)
 Stack Diameter is the diameter (or equivalent circular diameter) of discharge point (nearest tenth foot)
 If using cross-sectional area (A in square feet), equivalent diameter is $D = (1.273A)^{0.5}$
 Exhaust Temp in degrees F, actual or estimated to nearest 50 deg F
 Exhaust Flow Rate at discharge point in actual cubic feet per minute (ACFM)
 Exhaust Velocity in feet per second, design or measured

16. Remarks (basis for confidentiality of data, process description, modification description, etc.):

None, See AFC Sections on Air Quality and Public Health, and Appendices.

If you wish to specify process information as proprietary or confidential, space is provided for this purpose.
 The kinds and rates of emissions may not be held confidential; emissions are subject to public disclosure.

MOJAVE DESERT AIR QUALITY MANAGEMENT DISTRICT
 14306 Park Avenue, Victorville, CA 92392-2383
 (760) 245-1661 Facsimile: (760) 245-2022

http://www.mdaqmd.ca.gov
 Eldon Heaston
 Executive Director

APPLICATION FOR GASOLINE DISPENSING FACILITIES

Page 1 of 2; please type or print

PLEASE REMIT \$226.00 WITH APPLICATION; \$129.00 FOR CHANGE OF OWNER

1. Permit To Be Issued To (company name to receive permit): Genesis Solar, LLC		1a. Federal Tax ID No.: 35-2303285																																										
2. Mailing/Billing Address (for above company name): 700 Universe Blvd., Juno Beach, FL. 33408																																												
3. Facility or Business License Name (for equipment location): Genesis Solar Energy Project																																												
4. Facility Address - Location of Equipment (if same as for company, enter "Same"): Riverside County, Blythe, CA		Location UTM or Lat/Long: 33°38'5.39" N, 114°57'20.58"W																																										
5. Contact Name/Title: Duane McCloud	Email Address: duane.mccloud@nexteraenergy.com	Phone/Fax Nos.: (561) 694-3577																																										
6. Application is for: <input checked="" type="checkbox"/> New Construction <input type="checkbox"/> Modification* <input type="checkbox"/> Change of Owner*		For modification or change of owner: *Current Permit Number: _____																																										
7. Type of Organization (check one): <input type="checkbox"/> Individual Owner <input type="checkbox"/> Partnership <input checked="" type="checkbox"/> Corporation <input type="checkbox"/> Utility <input type="checkbox"/> Local Agency <input type="checkbox"/> State Agency <input type="checkbox"/> Federal Agency																																												
8. Vapor Control Equipment: Compliance w/ARB Exec. Order: Phase I: <input type="checkbox"/> Two-Point <input checked="" type="checkbox"/> Coaxial G-70- <u>any CARB approved Phase I system</u> Phase II: <input type="checkbox"/> Balance <input type="checkbox"/> Assist <input type="checkbox"/> None G-70- <u>any CARB approved Phase II system</u> If Phase II is complying with Exec Order G-70-52, Exhibit # is: _____																																												
9. Dispensers: No., Type, Make & Model: <u> 1 dispenser, unknown at this time</u>																																												
10. Nozzles: Fuel or Octane Number No. of Existing Nozzles: No. of Nozzles to Add: No. of Nozzles to Remove: New Total No. of Nozzles:	<table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <thead> <tr> <th>Single Product</th> <th>Single Product</th> <th>Single Product</th> <th>Dual Product</th> <th>Triple Product</th> <th>Diesel/ Other</th> <th>Diesel/ Other</th> </tr> </thead> <tbody> <tr> <td>gasoline</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>0</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>1</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>0</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>1</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>		Single Product	Single Product	Single Product	Dual Product	Triple Product	Diesel/ Other	Diesel/ Other	gasoline							0							1							0							1						
Single Product	Single Product	Single Product	Dual Product	Triple Product	Diesel/ Other	Diesel/ Other																																						
gasoline																																												
0																																												
1																																												
0																																												
1																																												
11. Nearest Receptors:		Distance (feet or meters):																																										
Residential Property Line		_____																																										
Off-site Workplace Property Line		_____ (Distance from center of closest island or dispenser)																																										
School Property Line		n/a																																										
Medical Facility Structure		n/a																																										
12. Signature of Responsible Person:		Date: 1/28/2010																																										
Print or Type Name:	Scott A. Busa	Title: Director																																										

- For District Use Only -

Application Number:	Invoice Number:	Permit Number:	Company/Facility Number:

**MOJAVE DESERT AIR QUALITY MANAGEMENT DISTRICT
FUEL DISPENSING STORAGE TANK INFORMATION**

Page 2 of 2; please type or print

13. Facility Name: Genesis Solar 16. Operating Schedule: Hours per day 24

14. Contact Name: _____ Days per week 7

15. Storage Tanks: *Note: asterisked (*) equipment is required on gasoline storage tanks* Weeks per year 52

Tank Number	Type		Remove?		Partition?		Capacity (gallons)	Product (type)	Position		Submerged Fill Tube?*		Fill Tube Type		Overfill Protect?*		Vent Valve?*		
	New	Exist	Y	N	Y	N			Above ground	Under ground	Y	N	Dual Point*	Coax*	Y	N	Y	N	
1	X		X		X		2000	gasoline	X					X					X

17. Fuel Throughput or Sales (gallons):

Fuel	Monthly	Annual
Gasoline	<900	10768
Diesel		

Notes: see emissions sheet attached
 Gasoline is defined as any organic liquid ... having a Reid Vapor Pressure of 200 mm Hg (3.9 psi) or greater, and used as a motor vehicle fuel... [District Rule 461]
 Gasoline includes but is not limited to all octanes (87U, 89U, 92U and various "high performance") of gasoline, methanol, ethanol, and "aviation gasoline" (AvGas).
 Gasoline does not include diesel, JP-4 (Jet-B), JP-5 (Jet-A), JP-8, kerosene, propane, LPG, natural gas (CNG or LNG).

GASOLINE TANK EMISSION CALCULATION

Reference: AP-42, Section 5.2, 6/08

***** Input *****

Facility Type/ID:

Facility Tank

Program is Applicable to All Grades/Types of Gasoline

UNDERGROUND TANK FILLING	lb/1000 gal * Table 5.2-7 Values
Balanced Submerged Filling:	0.3 Phase 1 Varc
Submerged Filling:	0
Splash Filling:	0
Tank Breathing:	1
Spillage:	0.7

VEHICLE REFUELING

Controlled:	1.1 Phase II VAREC
Uncontrolled:	0

Tank Throughput (gals/yr):	10768
----------------------------	-------

Intermediate Calculations

TP =	10.768
EF =	3.1

***** Output *****

Total VOC Losses (lb/yr):	33.3808
(lb/day):	0.09
(lb/hr):	0.004
(TPY):	0.0166904

* Enter 0 for any category which is not applicable.

FIXED ROOF TANK EMISSION CALCULATION

Reference: AP-42, Section 7.1, 9/97

Emissions Scenario

***** Input *****	X	: PTE
		: Actual
Number of Similar Tanks:	1	Year: Any
Stored Substance ID:	Diesel Fuel	Tank Cap. 3600 gallons
Tank ID:	Tank 1	Kn = 9.966409444 * Eq 41
Vapor Molecular Wt.:	130	Table 6*
Vapor Pressure (psia):	0.00648	Table 6*
Tank Diameter (ft):	6	
Tank Height/Length (ft):	9.5	
Avg. Vapor Space Height (ft):	4	
Avg. Diurnal Temp Change (degF):	28	Table 4 (Phoenix data used to simulate site)*
Paint Factor:	1	
Small Tank Adj. Factor:	1	
Product Factor:	1	* Section 19.1.2.2.3.3
Turnover Factor:	3.18	
Throughput (gals/yr):	6391	

Intermediate Calculations

TP =	6.39
Q =	0.01
D =	22.19
H =	2.03
T =	5.29

***** Output *****	Single Tank	All Tanks
Uncontrolled Emissions		
Breathing Loss (lb/yr):	3.66	3.66
Working Loss (lb/yr):	0.41	0.41
Total VOC Losses (lb/yr):	4.07	4.07
Controlled Emissions		
Control System Eff. (frac):	0	0
Total VOC Losses (lb/yr):	4.07	4.07
(lb/day):	0.0111	0.0111
(lb/hr):	0.0005	0.0005
(TPY):	0.0020	0.0020

Additional References: *API Bulletin #2518, October 1991
TTECI-2007



**BEFORE THE ENERGY RESOURCES CONSERVATION AND DEVELOPMENT
COMMISSION OF THE STATE OF CALIFORNIA
1516 NINTH STREET, SACRAMENTO, CA 95814
1-800-822-6228 – WWW.ENERGY.CA.GOV**

**APPLICATION FOR CERTIFICATION FOR THE
*GENESIS SOLAR ENERGY PROJECT***

Docket No. 09-AFC-8

**PROOF OF SERVICE
(Revised 2/22/10)**

APPLICANT

Ryan O’Keefe, Vice President
Genesis Solar LLC
700 Universe Boulevard
Juno Beach, Florida 33408
*E-mail service preferred
Ryan.okeefe@nexteraenergy.com

Scott Busa/Project Director
Meg Russel/Project Manager
Duane McCloud/Lead Engineer
NextEra Energy
700 Universe Boulevard
Juno Beach, FL 33408
Scott.Busa@nexteraenergy.com
Meg.Russell@nexteraenergy.com
Duane.mccloud@nexteraenergy.com

*E-mail service preferred
Matt Handel/Vice President
Matt.Handel@nexteraenergy.com
*Email service preferred
Kenny Stein,
Environmental Services Manager
Kenneth.Stein@nexteraenergy.com

Mike Pappalardo
Permitting Manager
3368 Videra Drive
Eugene, OR 97405
mike.pappalardo@nexteraenergy.com

*Kerry Hattevik/Director
West Region Regulatory Affairs
829 Arlington Boulevard
El Cerrito, CA 94530
Kerry.Hattevik@nexteraenergy.com

APPLICANT’S CONSULTANTS

Tricia Bernhardt/Project Manager
Tetra Tech, EC
143 Union Boulevard, Ste 1010
Lakewood, CO 80228
Tricia.bernhardt@ttech.com

*James Kimura, Project Engineer
Worley Parsons
2330 East Bidwell Street, Ste.150
Folsom, CA 95630
James.Kimura@WorleyParsons.com

COUNSEL FOR APPLICANT

Scott Galati
Galati & Blek, LLP
455 Capitol Mall, Ste. 350
Sacramento, CA 95814
sgalati@gb-llp.com

INTERESTED AGENCIES

California-ISO
e-recipient@caiso.com

Allison Shaffer, Project Manager
Bureau of Land Management
Palm Springs South Coast
Field Office
1201 Bird Center Drive
Palm Springs, CA 92262
Allison_Shaffer@blm.gov

INTERVENORS

California Unions for Reliable
Energy (CURE)
c/o: Tanya A. Gulesserian,
*Rachael E. Koss,
Marc D. Joseph
Adams Broadwell Joesph
& Cardoza
601 Gateway Boulevard,
Ste 1000
South San Francisco, CA 94080
tgulesserian@adamsbroadwell.com
rkoss@adamsbroadwell.com

Californians for Renewable
Energy, Inc. (CARE)
Michael E. Boyd, President
5439 Soquel Drive
Soquel, CA 95073-2659
michaelboyd@sbcglobal.net

OTHER

Alfredo Figueroa
424 North Carlton
Blythe, CA 92225
lacunadeaztlan@aol.com

ENERGY COMMISSION

JAMES D. BOYD
Commissioner and Presiding
Member
jboyd@energy.state.ca.us

ROBERT WEISENMILLER
Commissioner and Associate
Member
rweisenm@energy.state.ca.us

Kenneth Celli
Hearing Officer
kcelli@energy.state.ca.us

Mike Monasmith
Siting Project Manager
mmonasmi@energy.state.ca.us

Caryn Holmes
Staff Counsel
cholmes@energy.state.ca.us

Robin Mayer
Staff Counsel
rmayer@energy.state.ca.us

Jennifer Jennings
Public Adviser’s Office
publicadviser@energy.state.ca.us

*indicates change

I, Emily Festger, declare that on March 12, 2010, I served and filed copies of the attached *Application for Authority to Construct and Permit to Operate, and Application for Gasoline Dispensing Facilities to the MDAQMD* dated March 10, 2010. The original document, filed with the Docket Unit, is accompanied by a copy of the most recent Proof of Service list, located on the web page for this project at: [http://www.energy.ca.gov/sitingcases/genesis_solar].

The documents have been sent to both the other parties in this proceeding (as shown on the Proof of Service list) and to the Commission's Docket Unit, in the following manner:

(Check all that Apply)

FOR SERVICE TO ALL OTHER PARTIES:

sent electronically to all email addresses on the Proof of Service list;

by personal delivery or by depositing in the United States mail at Sacramento, California with first-class postage thereon fully prepaid and addressed as provided on the Proof of Service list above to those addresses **NOT** marked "email preferred."

AND

FOR FILING WITH THE ENERGY COMMISSION:

sending an original paper copy and one electronic copy, mailed and emailed respectively, to the address below (*preferred method*);

OR

depositing in the mail an original and 12 paper copies, as follows:

CALIFORNIA ENERGY COMMISSION

Attn: Docket No. 09-AFC-8
1516 Ninth Street, MS-4
Sacramento, CA 95814-5512
docket@energy.state.ca.us

I declare under penalty of perjury that the foregoing is true and correct.

Original Signed By: