

STATEMENT OF BASIS

Facility Name: Applied Energy North Island

Title V Application Number: APCD2010-APP-001040

Title V Permit Number: APCD2008-PTO-960392

Facility ID: APCD1988-SITE-00024

Equipment Address: Quay & Rogers Rd #370

Facility Contact: John Dow
Contact Phone: (858) 492-5462

Permit Engineer: Melissa Adams
Date Completed: 1-21-14

Senior Engineer: Doug Erwin
Date Reviewed: 1-21-14

1.0 Purpose of Statement of Basis

The purpose of this statement of basis is a renewal of the Title V permit and a re-examination of the basis for deeming this site an acid rain site under Title IV of the Clean Air Act (40 CFR Parts 72-78). The applicant submitted a separate request to remove the Title IV requirements from the permit, asserting that the facility is not subject to these requirements based on qualifying for the exemption at 40 CFR § 72.

2.0 Permit History

The Title V permit was last renewed on 2/24/06. Since the applicant submitted an application for renewal in 2010, an application shield is in place.

The following timeline pertains to events leading up to the applicant's request for re-examination of the facility's acid rain designation.

Timeline:

A power purchase agreement with SDG&E for the North Island power plant established the plant operation date of October 20, 1989. The turbine constructed was a General Electric LM 5000, APCD2008-PTO-050274.

On November 12, 2008, Applied Energy North Island submitted an application to replace the LM 5000 with an LM 6000 turbine, finding that the LM 5000 and its replacement parts were no longer available.

In 2010, the LM 6000 permit was issued as APCD2010-PTO-000639. Acid Rain Program conditions were added under the rationale that the turbine was a new affected unit.

On October 29, 2013, Applied Energy applied to have the Title IV status reexamined. (See discussion in Section 4.2)

2.1 Emissions Units

Permit #	Description
APCD2010-PTO-000639	COGENERATION NATURAL GAS FIRED COMBUSTION TURBINE, MAKE GE, MODEL LM6000PD, 42 MEGAWATT MAXIMUM RATED POWER OUTPUT, WITH DRY LOW NOX (DLN) BURNER, 50 MMBTU/HOUR JOHN ZINK DUCT BURNER, STEAM TURBINE, EMISSION CONTROL EQUIPMENT INCLUDING SCR (AT LEAST 650 CUBIC FEET OF CATALYST) WITH AMMONIA INJECTION AND OXIDATION CATALYST, SYSTEM EQUIPPED WITH VIM TECHNOLOGIES DATA ACQUISITION SYSTEM (DAS), AND CONTINUOUS EMISSION MONITORING SYSTEMS (CEMS)
APCD2006-PTO-005272	BOILER, STEAM GENERATOR (179 MM BTU/HR INPUT): NEBRASKA MODEL NS-6-99, DISTILLATE OIL-FIRED, MFR ID #2D1752. FUEL LINE IS EQUIPPED WITH A NON-RESETTABLE, TOTALIZING FUEL METER.
APCD2006-PTO-960901	FIRE PUMP: CATERPILLAR ENGINE, MODEL 3208, 165 BHP, S/N 90N71269. (960901-CCN-1/98)17CCR93115SJE01/06
APCD2006-PTO-973653	ONE (1) BOILER SET, RATED AT 147.6 MM BTU/HR, NEBRASKA BOILER CO, MODEL NSX-G-100-ECON, NATURAL GAS FIRED, S/N D-4619 EQUIPPED WITH A JOHN ZINKLOW NOX BURNER, FLUE GAS RECIRCULATION, OXYGEN TRIM AND A NON-RESETTABLE FUEL METER.

3.0 Facility Description

The facility consists of a combustion turbine, duct burner, electrical generator, a waste heat recovery unit, an emergency IC engine, and two boilers. Applied Energy provides steam to the Navy.

4.0 Primary Federal Applicability Determination

Rule 1401 - Title V Applicability

Rule 1412 - Title IV (Acid Rain) Applicability

4.1 Title V Applicability

The site will continue to be a Title V site, regardless of Title IV applicability, as discussed below:

Pollutant	PTE (ton/year) for the new turbine APCD2010-PTO-000639
NO _x	25.2
VOC	5.3
PM ₁₀	19.4
SO _x	4.2
CO	116.1
<i>Actual Emissions from Stationary Source</i> As reported by the facility, 2010	
HAPS:	(lb/yr)
Sum of HAPs	3100 lb/yr

Per Rule 1401(c)(26), a major stationary source means any stationary source, excluding any non-road engines, which emits or has the potential to emit one or more air contaminants in amounts equal to or greater than any of the following emission rates:

Title V Major Source, tons per year:			
Pollutant	Thresholds	Facility Actual	Major Source
Highest Federal HAP	10	1.10 (Formaldehyde)	No
Sum of Federal HAPs	25	1.6	No
		Facility Potential	
NO _x	100	>25.2	No
VOC	100	>5.3	No
PM ₁₀	100	>19.4	No
SO _x	100	>4.2	No
CO	100	>116.1	Yes

Given the above emissions, the facility is a major source for CO. Pursuant to 40 CFR Part 70.3(a)(4), this facility is therefore subject to the Operating Permit requirements of Title V of the federal Clean Air Act, Part 70 of Title 40 of the Code of Federal Regulations (CFR), and San Diego Regulation XIV, which incorporates the provisions of this federal program.

4.2 Title IV (Acid Rain) Applicability (40 CFR §§ 72 through 78):

For this review, the applicant submitted a request for exemption from the Acid Rain program based on an exemption provided at 40 CFR 72.6(b)(5). The facility has been cited as not subject to the Acid Rain Program for most of its permit history. The facility has been subject to Title IV

for the last 6 years, and has been tracked as such by EPA's Clean Air Markets Division (CAMD), which provides the primary management of the program, most notably management of SO₂ allowances and allowance trading.

Section 72.6(b) lists units that are not affected units subject to the requirements of the Acid Rain Program.

Section 72.6(b)(5) indicates that a qualifying facility that meets the following is not subject to Acid Rain:

- (i) Has, as of November 15, 1990, one or more qualifying power purchase commitments to sell at least 15 percent of its total planned net output capacity; and
- (ii) Consists of one or more units designated by the owner or operator with total installed net output capacity not exceeding 130 percent of the total planned net output capacity.

Applied Energy's power purchase agreement effective October 20, 1989, precedes the November 15, 1990 effective date of the Acid Rain Program. See Attachment 2, "SDG&E letter of October 27, 1989," which establishes the date of the power purchase agreement. The plant sells 100% of its output to the utility, exceeding the 15 percent requirement above, thereby meeting the first of the above exemption criteria.

Output established in the operating permit at 42 MW does not exceed 130 percent of the planned net output capacity above. See Attachment 3, "Excerpt from Power Purchase Agreement, section 3.1.1.1," and Attachment 4, Letter dated 3/20/90 from SDG&E to The Sithe/Energies Group, "Purchase of Generation Above Nameplate Rating at North Island" which identify that the planned output capacity is 34.5 MW to be delivered to SDG&E. Therefore, the second of the above exemption criteria is also met.

In addition, the definition of 'qualifying power purchase commitment' under 40 CFR 72.2 states that such commitment must not only be in place as of November 15, 1990, but once established, must not be changed in a way that allows pass-through of the costs of complying with the Acid Rain Program to the power purchaser (SDG&E). No such changes have been made to the October 20, 1989 agreement. Also, the definition of "qualifying power purchase commitment" requires that, as of the date of the original agreement (1) the power purchaser must remain unchanged, OR (2) the location of the power production facility and the identity of the steam purchaser remain unchanged. Applied Energy's North Island facility meets all three of these criteria, since SDG&E is the original power purchaser and remains the current power purchaser, and the U.S. Navy, as the original steam purchaser, continues to buy all of the steam produced by North Island at the location originally stipulated per the original steam agreement entered into on February 8, 1988 by Applied Energy and the U.S. Navy.

The replacement of the turbine is not relevant in this matter. The timeliness of the power purchase agreement and its substance, and the permit condition limiting power output stand as the basis for exemption from the Acid Rain Program under 40 CFR 72.6(b)(5). Title IV is therefore deemed not applicable. Title IV permit conditions will be removed from the turbine permit, except for the continuous emissions monitoring requirements referenced by District Rule 69.3.1.

5.0 Summary of Applicable Requirements

General Permit Program Applicable Requirements

Regulation	Rule Citation	Title
SDCAPCD Reg. II	10	Permits Required
SDCAPCD Reg. II	19	Provision of Sampling & Testing Facilities
SDCAPCD Reg. II	19.3	Emission Information
SDCAPCD Reg. II	21	Permit Conditions
SDCAPCD Reg. IV	60	Circumvention
SDCAPCD Reg. V	98	Breakdown Conditions: Emergency Variance

General Prohibitory Applicable Requirements

Regulation	Rule Citation	Title
SDCAPCD Reg. II	10(a)	Permits Required – (a) Authority to Construct
SDCAPCD Reg. II	10(b)	Permits Required – (b) Permit to Operate
SDCAPCD Reg. II	12	Registration of Specified Equipment
SDCAPCD Reg. II	19	Provision of Sampling & Testing Facilities
SDCAPCD Reg. II	19.3	Emission Information
SDCAPCD Reg. II	20.3	New Source Review
SDCAPCD Reg. II	21	Permit Conditions
SDCAPCD Reg. IV	50	Visible Emissions
SDCAPCD Reg. IV	51	Nuisance
SDCAPCD Reg. IV	52	Particulate Matter
SDCAPCD Reg. IV	53	Specific Contaminants
SDCAPCD Reg. IV	62	Sulfur Content of Fuels
SDCAPCD Reg. IV	67.17	Open VOC Containers
SDCAPCD Reg. IV	68	Fuel Burning Equipment - NOx
SDCAPCD Reg. IV	69.3	Stationary Gas Turbine Engines - RACT
SDCAPCD Reg. IV	69.3.1	Stationary Gas Turbine Engines - BARCT
SDCAPCD Reg. XII	1200	Toxic Air Contaminants – New Source Review
SDCAPCD Reg. II	20.3	NSR – major Stationary Source and PSD Stationary Source (Version 11/4/98)(not in SIP)
NSPS	40 CFR Part 60, Subpart Db	40 CFR Part 60, Subpart Db – Standards of Performance for Industrial-Commercial-Institutional Steam Generating
NSPS	40 CFR Part 60, Subpart GG	40 CFR Part 60, Subpart GG – Standards of Performance for Stationary Gas Turbines
NSPS	40 CFR Part 60, Subpart KKKK	40 CFR Part 60, Subpart KKKK – Standards of Performance for Stationary Combustion Turbines

NESHAPS	40 CFR Part 63 Subpart ZZZZ	40 CFR Part 63, Subpart ZZZZ – NESHAPS for Stationary Reciprocating Internal Combustion Engines
Title IV	40 CFR Part 75	Continuous Emission Monitoring, as referenced in Rule 69.3.1

6.0 Applicability of Federal and State Regulations

40 CFR Part 60, Subpart Db

NSPS for Industrial-Commercial-Institutional Steam Generating

Subpart Db does not apply to the turbine duct burner, since Db does not apply when KKKK applies. Subpart Db does apply to boiler 973653, since the boiler rating is greater than 100 MMBtu/hr. Subpart Db does apply to boiler 5272, since the boiler rating is greater than 100 MMBtu/hr. Permit conditions for the boilers covering the requirements of this rule have been included on the permits in the form of other, more stringent requirements, since the Subpart Db requirements are subsumed by these more stringent requirements.

40 CFR Part 60, Subpart GG

NSPS for Stationary Gas Turbines

Subpart GG does not apply to the turbine. Stationary combustion turbines regulated under 40 CFR Part 60 Subpart KKKK are exempt from the requirements of Subpart GG.

40 CFR Part 60, Subpart KKKK

NSPS for Stationary Combustion Turbines

Subpart KKKK does apply to the turbine, since the turbine rating is greater than 10 MMBtu/hr, and construction commenced after February 18, 2005. Permit conditions have been included covering the requirements of this rule.

40 CFR Part 63, Subpart ZZZZ

NESHAPS for Stationary Reciprocating Internal Combustion Engines

Subpart ZZZZ does apply to the engine, since the engine is a stationary internal combustion engine. Table 2d(4) applies, since the equipment is an existing diesel fired engine located at an area source of HAPs. Permit conditions for the engine have been included covering the requirements of this rule.

California ATCM 17CCR93115

Air Toxics Control Measure for Stationary Compression Ignition Engines

ATCM 17CCR93115 does apply to the engine, since the engine is a stationary compression ignition engine. Permit conditions have been included covering the requirements of this rule.

7.0 Permit Shield

The applicant has requested the permit shields detailed in Attachment 1401-Q

The Permit Shield requests and justifications have been reviewed and evaluated. The following requests are granted:

Permit Number	Rule or Regulation	Basis	Comments
FW	SDAPCD Regulation IV, Rules 52 and 54	Not applicable	54-dust & fumes, does not apply to combustion 52- Particulate matter – does not apply if 53 applies
FW	SDAPCD Regulation XI	Not applicable	NESHAPS Subparts A, C, D, E, F, and M, for beryllium, mercury, vinyl chloride, and asbestos for various manufacturing processes. The source does not fit any of these manufacturing categories.
FW	40 CFR Part 61	Not applicable	NESHAPS for radon, beryllium, mercury, vinyl chloride, radionuclides, benzene, asbestos, arsenic, arsenic trioxide, fugitives for various manufacturing processes. The source does not fit any of these manufacturing categories.
FW	SDAPCD Reg. X Subpart Kb	Not applicable	Subpart Kb applies to tanks only; no such equipment onsite
000639	SDAPCD Rule 69.2	Not applicable	69.2-Industrial and Commercial Boilers The turbine is not subject to this rule
000639	NSPS Subpart Db	Not applicable	Db does not apply when KKKK applies
000639	40 CFR 60 Appendix F	Not applicable Applicable – see explanation below table	CEMS is required pursuant to the applicable NSPS; QA is Rule 19.2. Appendix F QA Procedures not applicable
000639	SDAPCD Rules 53, 62, 68, 69.3	Equivalent monitoring, recordkeeping, and reporting requirements in the permit.	The applicable requirements within these rules are subsumed by permit requirements of equal or greater stringency.
000639	NSPS Subpart GG	Equivalent monitoring, recordkeeping, and reporting requirements.	The applicable requirements within these rules are subsumed by permit requirements of equal or greater stringency.
000639	40CFR Parts 60.4(b) & 60.7(c) (Records)	Equivalent reporting requirements.	Federal rules subsumed by reporting requirements in NSR and Rule 19.2
000639	Rule 53, 62, 69.3,	Subsumed by	The applicable requirements within these

	NSPS Subpart GG	equivalent requirements	rules are subsumed by permit requirements of equal or greater stringency.
973653	Rule 53, Rule 62, Rule 68, Rule 69.2(d) & NSPS Subpart Db	Subsumed by equivalent requirements	The applicable requirements within these rules are subsumed by permit requirements of equal or greater stringency.
005272	Rule 69.2 (d), (e)(2), (f), and (g)	Subsumed by equivalent requirements	The applicable requirements within these rules are subsumed by permit requirements of equal or greater stringency.

The permit shield for 40 CFR 60 Appendix F will be removed from the turbine permit, PTO-000639. Since Part 75 (Title IV) is no longer applicable, as detailed in Section 4.2 of this analysis, the continuous emissions monitoring requirements of Part 60 appendix F are applicable. Part 75 will be continued to be referenced only inasmuch as it is a monitoring requirement of District Rule 69.3.1.

Permit Number	Rule or Regulation No Longer Shielded
APCD2010-PTO-000639	40 CFR 60 Appendix F

8.0 Permit Streamlining

The applicant has requested the permit streamlining detailed on Attachment 1401-O. The Permit Streamlining request and justifications have been reviewed and evaluated. Permit Streamlining allows for compliance to be ensured for multiple applicable requirements by complying with the most stringent of these requirements. The requested permit streamlining will be granted as follows. The most stringent of the evaluated requirements have been included in the permit:

Permit Number	Multiple Applicable Requirements	Streamlined Requirements
000639	Turbine NOx limit, Rule 69.3, 40 CFR 60 GG and Db, NSR Permit Limit	NSR Permit Limit
000639	Duct Burner NOx limit, Rule 68, NSR Permit Limit	NSR Permit Limit
000639	Turbine NOx limit, Rule 53, 40 CFR 60 GG and Db, NSR Permit Limit	NSR Permit Limit
000639	Sulfur Content of Fuel, Rule 62, 40 CFR 60 Subpart GG and Db, NSR Permit Limit	PUC Requirement
973653	Boiler NOx limit, Rule 69.2, NSR Permit limit, Rule 68	NSR Permit Limit

973653	Sulfur Content of Fuel, Rule 62, PUC Sulfur Limit	PUC Requirement
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9.0 Monitoring, Recordkeeping and Reporting

Turbine 000639:

Monitoring: The turbine is equipped with a CEMS to measure NO_x, CO, and NH₃ emissions as required pursuant to NSR, Rule 69.3, Rule 69.3.1, 40 CFR Part 60 Subpart GG and 40 CFR Part 60 Subpart KKKK. The turbine is also equipped with continuous monitors to measure or calculate and record hours of operation, fuel flow rate, exhaust gas temperature, heat input, power output, SCR inlet temperature, and ammonia injection rate.

Performance specifications, RATA, and quality assurance measures that were formerly based on Title IV will now be based on Part 60, Appendices B and F, except where adherence with sections of Part 75 is a requirement of District Rule 69.3.1.

Part 75 requirements of Rule 69.3.1:

1. Section 75.10, General operating requirements
2. Section 75.12, Specific provisions for monitoring NO_x emission rate
3. Part 75, Appendix A, performance specifications and test procedures
4. Part 75, Appendix B, quality assurance

Compliance Assurance Monitoring (CAM): The turbine is expected to have pre-control device emissions greater than 100% of the major source threshold for NO_x. However, since the permit specifies a continuous compliance determination method, the emission limitation is exempt from CAM under 40 CFR § 64.2 (b)(vi).

Recordkeeping: Records are required to be maintained for five years for the following: emissions of NO_x and CO, hours of operation, fuel flow, heat input, power output, SCR inlet temperature, and ammonia injection rate.

Reporting: Conditions requiring reporting of excess emissions and monitor downtime for 40 CFR Part 60 Subpart KKKK, *Standards of Performance for Stationary Combustion Turbines*, have been added to the turbine permit with this application.

Reporting of emissions exceedances is required within 96 hours of an exceedance pursuant to the California Health and Safety Code.

Semiannual reporting of deviations is required.

Boiler 005272:

CAM: Since the boiler is not expected to have pre-control device emissions greater than 100% of the major source threshold for any pollutant, CAM is not required.

Monitoring and Recordkeeping: A NO_x source test and a non-resettable, totalizing fuel meter are required.

Reporting: Semiannual reporting of deviations is required.

Boiler 973653:

CAM: Since the boiler is not expected to have pre-control device emissions greater than 100% of the major source threshold for any pollutant, CAM is not required.

Monitoring and Recordkeeping: A NO_x source test and a non-resettable, totalizing fuel meter are required.

Reporting: Semiannual reporting of deviations is required.

Engine 960901:

CAM: Since the engine is not expected to have pre-control device emissions greater than 100% of the major source threshold for any pollutant, CAM is not required.

Monitoring: Monitoring is required in the form of a non-resettable, totalizing fuel meter. Periodic monitoring of required maintenance under District Rule 12, California ATCM (Air Toxics Control Measure) 17CCR93115, and NESHAPS Subpart ZZZZ is also stipulated in the permit conditions.

Recordkeeping: Recordkeeping is required for California diesel fuel certification, hours of operation and deviations from Subpart ZZZZ maintenance requirements.

Reporting: Semiannual reporting of deviations is required.

10.0 Outside Review

Permit Process-Public Notification and EPA Review

The District will provide public notice in accordance with Rule 1415, and will provide a 45 day review period for the EPA.

11.0 Recommendations

The recommendation is to issue the new District and Title V permit following successful completion of the EPA and public notice review periods. Compliance is ensured with all applicable requirements by permit conditions.

12.0 Attachments

1. Application Forms
 - a. Form 1410-B Minor modification application for acid rain reexamination
 - b. Form 1401-A1 Stationary Source Summary
 - c. Form 1401-A2 Stationary Source Summary
 - d. Form 1401-G Insignificant Activity List

- e. Form 1401-H1 Applicable Requirements Summary Checklist
 - f. Form 1401-H2 List of Permits by Equipment Category
 - g. Form 1401-I Certification Statement
 - h. Form 1401-K Compliance Certification Schedule
 - i. Form 1401-M Abatement Devices
 - j. Form 1401-O Multiple Applicable Requirements Streamlining
 - k. Form 1401-Q Permit Shield
2. Letter dated 10/27/89 from SDG&E to Energy Factors, “Firm Capacity Test Results for North Island”
 3. Excerpt from Power Purchase Agreement, Section 3.1.1.1.
 4. Letter dated 3/20/90 from SDG&E to The Sithe/Energies Group, “Purchase of Generation Above Nameplate Rating at North Island”
 5. Facility-Wide Title V Permit 960392

**San Diego County Air Pollution Control District
10124 Old Grove Road San Diego CA 92131-1649
(858) 586-2600 FAX (858) 586-2601**

**TITLE V APPLICATION
Stationary Source Summary (FORM 1401-A1)**

Company Name Applied Energy LLC	District Use Only NEDS # _____ SITE ID # _____
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I. FACILITY IDENTIFICATION

- Facility Name (if different than company name): Applied Energy LLC North Island
- Four digit SIC Code: 4961
- Parent Company (if different than Company Name): _____
- Mailing Address: 8835 Balboa Avenue, #D
City San Diego State CA Zip 92123
- Street Address or Source Location: Quay and Rogers Road, #370, NAS North Island
City San Diego State CA Zip 92135
- UTM Coordinates: _____
- Source Located within 50 miles of a state line: Yes No (All sources **are** within 50 miles)
- Source Located within 1000 feet of a school: Yes No
- Type of Organization: Corporation Sole Ownership Government
 Partnership Utility Company
- Legal Owner's Name: Applied Energy LLC
- Owner's Agent name (if any): _____
- Responsible Official: David Sweigart
- Plant Site Manager/Contact: Mike Stewart Phone #: 619-437-8067 FAX #: 619-437-4985
- Application Contact: John R. Dow
- Type of Facility: Power Generation
- General description of processes/products: Power Generation and Steam Generation
- Is a Federal Risk Management Plan (RMP) pursuant to Section 112(r) required? Yes No
(If application is submitted after RMP due date, attach verification that plan is registered with the appropriate agency.)

II. TYPE OF PERMIT ACTION (check)	CURRENT PERMIT (permit number)	EXPIRATION (date)
<input type="checkbox"/> Initial Title V Application	N/A	N/A
<input type="checkbox"/> Permit Renewal		
<input checked="" type="checkbox"/> Significant Permit Modification	960392	2/24/2011
<input type="checkbox"/> Minor Permit Modification		
<input type="checkbox"/> Administrative Amendment		

III. DESCRIPTION OF PERMIT ACTION

- Does the permit action requested involve: Temporary Source Voluntary Emissions Caps
 Acid Rain Source Alternative Operating Scenarios Abatement Devices
 CEMs Permit Shield
 Outdated SIP Requirement Streamlining Multiple Applicable Requirement Streamlining
 Source Subject to MACT Requirements [Section 112]
 Source Subject to Enhanced Monitoring (40CFR64) [Compliance Assurance Monitoring]
- Is source operating under a Compliance Schedule? Yes No Proposed
- Is source operating under a Variance Yes No (If Yes, please attach variance information)
- For permit modification, provide a general description of the proposed permit modification:
Replacement of existing LM 5000 turbine with LM 6000 turbine and updated emission controls.

IV. SUPPLEMENTAL ATTACHMENTS*: Forms 1401-G,H1,H2,I,K,L,M,O,Q

* Means all attachments to the complete application.

**San Diego County Air Pollution Control District
10124 Old Grove Road San Diego CA 92131-1649
(858) 586-2600 FAX (858) 586-2601**

**TITLE V APPLICATION
Stationary Source Summary (FORM 1401-A2)**

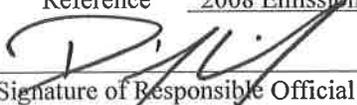
Company Name <u>Applied Energy LLC, North Island</u>	District Use Only NEDS # _____ SITE ID # _____
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I. MAJOR SOURCE APPLICABILITY

Check appropriate pollutant(s) for which you are a Major Source under Title V. Applicability is based on potential to emit. If more space is necessary, use additional forms. Please type or print legibly.

POLLUTANT	MAJOR SOURCE THRESHOLD TOTAL EMISSIONS, TPY	(check if appropriate)
VOC	100	<input type="checkbox"/>
PM ₁₀	100	<input type="checkbox"/>
SO ₂	100	<input type="checkbox"/>
NO _x	100	<input checked="" type="checkbox"/>
CO	100	<input type="checkbox"/>
ODC	100	<input type="checkbox"/>
LEAD COMPOUNDS	10	<input type="checkbox"/>
HAZARDOUS AIR POLLUTANTS		
SINGLE HAP	10	<input type="checkbox"/>
		<input type="checkbox"/>
		<input type="checkbox"/>
COMBINATION HAP	25	<input type="checkbox"/>
		<input type="checkbox"/>
		<input type="checkbox"/>
		<input type="checkbox"/>

Attach all necessary calculations to this form as applicable. NOTE: Calculations are only needed if no Emission Inventory is on file with the District

Reference 2008 Emission Inventory Report, Facility 54A

 Signature of Responsible Official
David Sweigart
 Print Name of Responsible Official
General Manager
 Title of Responsible Official

Inventory Year 2008
2-23-10
 Date
(858) 492-5470
 Telephone No. of Responsible Official

II. EMISSIONS CALCULATIONS ATTACHED (as needed)

Yes No

DISTRICT USE ONLY

Date Application Received: 2-25-10
 Application Filing Fee: \$ 5108.-
 Receipt #: _____

Application # APCD2010-APP-001⁰⁴⁰
 District Received Stamp: _____
 Fee Code: JFL

**San Diego County Air Pollution Control District
10124 Old Grove Rd., San Diego, CA 92131
(858) 586-2600 FAX (858) 586-2601**

**TITLE V APPLICATION
Insignificant Activity List (FORM 1401-G)**

Company Name <u>Applied Energy North Island LLC</u>	District Use Only
Facility Address: <u>Quay and Rogers Road #370, San Diego, CA 92135</u>	NEDS # _____ SITE ID # _____

LIST OF EQUIPMENT – INSIGNIFICANT ACTIVITIES

Place a check mark in the appropriate box for equipment that is considered an insignificant activity based on throughput or equipment capacity.

Exemptions based on Size (Capacity)

<u>(Condensed Language of Rule)</u>	<u>Appendix A Citation</u>
<input type="checkbox"/> Stationary & portable internal combustion engines with ≤ 50 bhp output rating	(d)(1)(iii)
<input type="checkbox"/> Stationary gas turbines with a power rating of < 0.3 megawatt (MW) or a maximum gross heat input rating of 1 million BTUs per hour	(d)(1)(iv)
<input type="checkbox"/> Water cooling towers & ponds with a capacity $< 10,000$ gal/min not used for evaporative cooling of process water or not used for evaporative cooling of water, contaminated water or industrial waste water from barometric jets or from barometric condensers.	(d)(2)
<input type="checkbox"/> Fuel-burning equipment with a maximum gross heat input rate of < 1 million Btu/hour when not part of a process, process line, line, equipment, article, machine or other contrivance for which a permit to operate is required by these Rules and Regulations	(d)(4)(i)
<input type="checkbox"/> Fuel burning equipment with a maximum gross heat input of < 20 million Btu/hour, and fired exclusively with natural gas and/or liquefied petroleum gas	(d)(4)(ii)
<input type="checkbox"/> Steam boilers, process heaters, and steam generators with a maximum gross heat input of < 5 million Btu/hour	(d)(4)(iii)
<input type="checkbox"/> Crucible-type or pot-type furnaces with a brimful capacity of < 450 in ³ of any molten metal	(d)(12)
<input type="checkbox"/> Crucible, pot or induction furnaces with a capacity of ≤ 2500 in ³ , in which no sweating or distilling is conducted and from which only non-ferrous metals except yellow brass, are poured or non-ferrous metals are held in a molten state	(d)(13)
<input type="checkbox"/> Dry batch mixers with ≤ 0.5 cubic yards rated working capacity	(d)(27)
<input type="checkbox"/> Batch mixers (wet) with ≤ 1 cubic yard capacity where no organic solvents, diluents or thinners are used.	(d)(28)
<input type="checkbox"/> Roofing kettles (used to heat asphalt) with a capacity of ≤ 85 gallons	(d)(33)
<input type="checkbox"/> Abrasive blasting equipment with a manufacturer's-rated sand capacity of < 100 lbs or < 1 ft ³	(d)(34)
<input type="checkbox"/> Paper shredders and paper disintegrators that have a capacity of 600 pounds per hour or less, and the associated conveying systems and baling equipment.	(d)(41)
<input type="checkbox"/> Ovens having an internal volume of ≤ 27 ft ³ in which organic solvents or materials containing organic solvents are charged	(d)(59)
<input type="checkbox"/> Cold solvent cleaning tanks, vapor degreasers, and paint stripping tanks with a liquid surface area of ≤ 1.0 ft ²	(d)(61)(i)
<input type="checkbox"/> Cold solvent cleaning tanks, vapor degreasers, and paint stripping tanks which have a maximum capacity of ≤ 1 gallon	(d)(61)(ii)

TITLE V APPLICATION
Insignificant Activity List (FORM 1401-G)

Continued - Exemptions based on Size (Capacity)

<u>(Condensed Language of Rule)</u>	<u>Appendix A Citation</u>
<input type="checkbox"/> Stationary organic compound storage tanks with a capacity of ≤ 250 gallons	(e)(1)
<input type="checkbox"/> Liquid surface coating application operations using hand-held brushes for application of a primer coating from containers of \leq eight (8) ounces in size, to fasteners to be installed on aerospace parts	(h)(5)
<input type="checkbox"/> Liquid surface coating application operations using air brushes with a coating capacity of ≤ 2 ounces for the application of a stencil coating	(h)(6)
<input type="checkbox"/> Metal inspection tanks that: a) do not utilize a suspension of magnetic or fluorescent dye particles in volatile organic solvent, and b) have a liquid surface area $< 5 \text{ ft}^2$ and c) are not equipped with spray type flow or a means of solvent agitation	(o)(5)
<input type="checkbox"/> Bakery ovens used for baking yeast leavened products where the combined rated heat input capacity is < 2 million Btu/hr	(o)(37)

Exemptions based on Production Rates (Emission Limits)

<input type="checkbox"/> Printing or graphic arts presses located at a stationary source which emits a total of < 15 lbs/day of VOC's subject to Rule 67.16, on each day of operation	(d)(7)
<input type="checkbox"/> Solder levelers, hydrosqueegees, wave solder machines, and drag solder machines which use < 10 lbs/day of any material containing VOCs	(d)(23)
<input type="checkbox"/> Fire extinguishing equipment, using halons with a charge of < 50 lbs. of a Class I or Class II ozone depleting compound.	(d)(31)
<input type="checkbox"/> Coffee roasting equipment with a manufacturer's rating of ≤ 15 lbs/hr	(d)(45)
<input type="checkbox"/> Equipment used to manufacture bio-agricultural products for exclusive use in field testing required to obtain FDA, EPA, USDA and /or Cal-EPA approval, provided the uncontrolled emissions of VOCs from all such operations < 5 ton/yr.	(d)(49)(iii)
<input type="checkbox"/> Oil quenching tanks which use < 20 gal/yr of make-up oil	(d)(56)
<input type="checkbox"/> Equipment that is used to conduct research and develop new or improved processes/products, and is operated by technically trained personnel under the supervision of a research director, and is not used in the manufacture of products for sale or exchange for commercial profit, and all emissions are < 15 lbs/day.	(d)(48)
<input type="checkbox"/> Powder coating operations, except metalizing gun operations, where surface preparation or cleaning solvent usage is < 0.5 gal/day	(d)(62)
<input type="checkbox"/> Equipment used to transfer fuel to & from amphibious ships for maintenance purposes, provided total annual transfers $< 60,000$ gal/yr.	(f)(2)
<input type="checkbox"/> Stationary storage tanks (excluding tanks subject to Rule 61.9) used exclusively for the storage of liquid organic solvents used as dissolvers, viscosity reducers, reactants, extractants, cleaning agents or thinners provided that emissions < 15 lbs/day.	(e)(3)
<input type="checkbox"/> Liquid surface coating or adhesive application operations (portable or stationary) where not more than 20 gallons per year of material containing organic compounds are applied	(h)(1)
<input type="checkbox"/> Liquid surface coating application operations exclusively using materials with a VOC content of < 20 g/L where < 30 gal/day of such materials are applied.	(h)(2)
<input type="checkbox"/> Foam manufacturing or application operations which emit < 5 lbs/day of VOCs	(i)(1)
<input type="checkbox"/> Reinforced plastic fabrication operations using resins such as epoxy and/or polyester which emit < 5 lbs/day of VOCs	(i)(2)
<input type="checkbox"/> Plastics manufacturing or fabrication operations which emit < 5 lbs/day of VOCs	(i)(3)
<input type="checkbox"/> Cold solvent degreasers used for educational purpose and which emit < 5 lbs/day of VOCs	(i)(4)

TITLE V APPLICATION
Insignificant Activity List (FORM 1401-G)

- Golf grip application stations which exclusively use liquid materials with an initial boiling point of 450°F (232°C), or greater and which emit < 5 lbs/day of VOCs. (i)(5)
- Batch-type waste-solvent recovery stills with batch capacity of ≤ 7.5 gallons for onsite recovery provided the still is equipped with a safety device & VOC emissions are < 5 lbs/day (i)(6)
- Peptide and DNA synthesis operations which emit < 5 lbs/day of VOCs (i)(7)
- Equipment used for washing or drying articles fabricated from metal, cloth, fabric or glass, provided that no organic solvent is employed in the process and that no oil or solid fuel is burned and none of the products being cleaned has residues of organic solvent and VOC emissions are < 5 lbs/day (i)(8)
- Hot wire cutting of expanded polystyrene foam which emit < 5 lbs/day of VOCs. (i)(9)
- Any coating and/or ink manufacturing operations located at a stationary source, which emit < 15 lbs/day of VOCs. (o)(9)
- Any operation producing materials for use in cosmetic or pharmaceutical products and/or manufacturing cosmetic or pharmaceutical products by chemical processes, which emit < 15 lbs/day of VOCs (o)(12)
- Refrigeration units except those used as, or with, air pollution control equipment with a charge of < 50 lbs of a Class I or II ozone depleting compound. (o)(18)
- Atmospheric organic gas sterilizer cabinets where ethylene oxide emissions are < 5 lbs/yr (o)(28)
- Aerosol can puncturing/crushing operations which vents all emissions through a properly operated/maintained carbon canister, provided < 500 cans/day are processed. (o)(29)(ii)
- Solvent wipe cleaning operations using a container applicator that minimizes emissions to the air where the uncontrolled emissions of VOCs < 5 ton/yr, or the total purchase of solvents < 1,500 gal/yr, or the total purchase of solvents containing a single HAP < 350 gal/yr. (o)(32)
- Equipment approved for use by the EPA for recovering and/or recycling CFCs provided such equipment is charged with < 50 lbs. of a Class I or II ozone depleting compound. (o)(33)
- Stationary IC engines rated at ≤ 200 bhp installed and operated before November 15, 2000, which operate < 200 hr/yr. (o)(34)(ii)

San Diego County Air Pollution Control District
 10124 OLD GROVE ROAD SAN DIEGO CA 92131-1649
 (858) 586-2600 FAX (858) 586-2601

TITLE V APPLICATION
Applicable Requirements Summary Checklist (FORM 1401-H1)

Company Name <u>Applied Energy North Island LLC</u>	District Use Only NEDS # _____ SITE ID # _____
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APPLICABLE REQUIREMENTS: Applicable requirements which apply to an entire facility are listed first. The applicant should check appropriate boxes on the form and attach emission unit specific permit number lists where necessary. Where streamlining is employed, note on this form. If information does not fit in the space allotted, attach documentation and reference it on this form. **Type or print legibly.**

RULE	RULE DESCRIPTION	Test Method or Rule Section	Monitoring, Records, Reports, Rule Section	Facility	987494	5272	973653	960901										Future Effective Date
Facility Applicable Requirement Description																		
10(a)	Permits Required – (a) Authority to Construct			X														
10(b)	Permits Required – (b) Permit to Operate			X	X	X	X											
19	Provision of Sampling & Testing Facilities			X														
19.2	Continuous Emission Monitoring Requirements			X	X	X	X	x										
19.3	Emission Information			X	X	X												
NSR	New Source Review			X														
PSD	Prevention of Significant Deterioration																	
21	Permit Conditions			X	X	X	X											
50	Visible Emissions			X	X	X	X	X										
51	Nuisance			X				X										
60	Circumvention			X														
67.0	Architectural Coatings	(g)		X														
67.17	Storage of Materials Containing VOC	(e)		X				X										
71	Abrasive Blasting			X														
98	Breakdown Conditions: Emergency Variance			X	X	X	X	X										
101	Burning Control																	
131	Stationary Source Curtailment Plan																	
132	Traffic Abatement Plan																	

TITLE V APPLICATION
Applicable Requirements Summary Checklist (FORM 1401-H1) - continued

RULE	RULE DESCRIPTION	Test Method or Rule Section	Monitoring, Records, Reports, Rule Section	Facility	987494	5272	973653	960901										Future Effective Date
Equipment Specific Applicable Requirement Description																		
50	Visible Emissions			X	X	X	X	X										
51	Nuisance			X	X	X	X	X										
52	Particulate Matter	Method 5																
53	Specific Contaminants	Method 5			X	X	X											
53.1	Scavenger Plants																	
54	Dust and Fumes	Method 5																
58	Incinerator Burning																	
59	Control of Waste Disposal – Site Emissions	(e)	(e) & (f)															
60	Circumvention			X	X	X	X	X										
61.1	Receiving & Storing VOCs at Bulk Plants & Terminals	(d)	(c)(7)															
61.2	Transfer of VOCs into Mobil Transport Tanks	(c)(10)																
61.3	Transfer of VOCs into Stationary Storage Tanks		(c)(2)(iii)															
61.4	Transfer of VOCs into Vehicle Fuel Tanks																	
61.5	Visible Emissions Standards for Vapor Control Equip.		VE															
61.7	Spillage & Leakage of VOCs																	
61.8	Certification Requirements for Vapor Control Equip.																	
62	Sulfur Content of Fuels			X	X	X	X	X										
64	Reduction of Animal Matter																	
66	Organic Solvents	(p)	(o)															
67.1	Alternative Emission Control Plans (AECPL)	(c)	(d)															
67.2	Dry Cleaning - Petroleum Solvent	(f)	(e)															
67.3	Metal Parts Coating	(g)	(f)															
67.4	Can & Coil Coating	(g)	(f)															
67.5	Paper, Film and Fabric Coating	(f)	(e)															
67.6	Solvent Cleaning Operation	(f)	(e)															
67.7	Cutback & Emulsified Asphalt	(f)	(e)															
67.9	Aerospace Coating Operations	(g)	(f)															
67.10	Kelp Processing and Bio-Polymer Mfg.	(f)	(e)															
67.11	Wood Products Coating Operations (not in SIP)	(f)	(e)															

TITLE V APPLICATION
Applicable Requirements Summary Checklist (FORM 1401-H1) - continued

RULE	RULE DESCRIPTION	Test Method or Rule Section	Monitoring, Records, Reports, Rule Section	Facility	987494	5272	973653	1069901											Future Effective Date
67.12	Polyester Resin Operations	(g)	(f)																
67.15	Pharmaceutical & Cosmetic Manufacturing	(e)																	
67.16	Graphic Arts Operations	(g)	(f)																
67.17	Open VOC Containers	(e)		X				X											
67.18	Marine Coating Operations	(g)	(f)																
67.19	Coating and Printing Inks Mfg. Operations	(g)	(f)																
67.20	Motor Vehicle & Mobile Equipment Refinishing Operations																		
67.21	Adhesive Material Application Operations																		
67.22	Expandable Polystyrene Foam Products Manufacturing Operations (not in SIP)																		
67.24	Bakery Ovens	(f)	(e)																
68	Fuel Burning Equipment - NOx				X	X													
69.2	Boilers	(f)	(e) & (g)			X	X												
69.3	Stationary Gas Turbine Engines - RACT	(f)	(e) & (g)		X														
69.3.1	Stationary Gas Turbine Engines - BARCT (not in SIP)	(f)	(e) & (g)		X														
69.4	Stationary Internal Combustion Engines - RACT	(f)	(e)	X				X											
69.4.1	Stationary Internal Combustion Engines - BARCT (not in SIP)	(f)	(e)																
70	Orchard Heaters																		
71	Abrasive Blasting			X															
20.1	Applicability, Definitions, Emission Calculations, Emission Offsets and Banking, Exemptions, and Other Requirements (SIP Version 7/5/79)				X														
20.1	NSR - General Provisions (Version 11/4/98) (not in SIP)				X														
20.2	Standards for Authority to Construct Best Available Control Technology (SIP Version 7/5/79)				X														
20.2	NSR - Non-major Stationary Sources (Version 11/4/98) (not in SIP)																		
20.3	Standards for Authority to Construct - Air Quality Analysis (SIP Version 7/5/79)																		

TITLE V APPLICATION
Applicable Requirements Summary Checklist (FORM 1401-H1) - continued

RULE	RULE DESCRIPTION	Test Method or Rule Section	Monitoring, Records, Reports, Rule Section	Facility	987494	5272	973653	1060901										Future Effective Date
20.3	NSR – Major Stationary Source and PSD Stationary Source (Version 11/4/98) (not in SIP)				X													
20.4	Standards for Authority to Construct - Major Sources (SIP Version 7/5/79)				X													
20.4	NSR – Portable Emission Units (Version 11/4/98) (not in SIP)																	
20.5	Power Plants (SIP Version 7/5/79)																	
20.6	Standards for Permit to Operate Air Quality Analysis (SIP Version 7/5/79)																	
	Regulation X - Standards of Performance for New Stationary Sources (NSPS)																	
SUBPART		Rule #	Rule #															
A	General Provisions		260.7 260.13	X														
D	Standards of Performance for Fossil-Fuel Fired Steam Generators	260.46	260.45															
Da	Standards of Performance for Electric Utility Steam Generating Units Constructed After September 18, 1978		260.47a 260.48a 260.49a															
Db	Standards of Performance for Industrial-Commercial-Institutional Steam Generating	260.45b 260.46b	260.47b 260.48b 260.49b															
E	Standards of Performance for Incinerators	260.54	260.53															
I	Standards of Performance for Asphalt Concrete Plants	260.93																
K	Standards of Performance for Storage Vessels for Petroleum Liquids Constructed after June 11, 1973 and Prior to May 19, 1978		260.113															
Ka	Standards of Performance for Storage Vessels for Petroleum Liquids Constructed after May 18, 1978	260.113a	260.115a															
Kb	Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for which Construction, Reconstruction, or Modification Commenced after July 23, 1984	260.113b	260.115b 260.116b															

TITLE V APPLICATION
Applicable Requirements Summary Checklist (FORM 1401-H1) - continued

RULE	RULE DESCRIPTION	Test Method or Rule Section	Monitoring, Records, Reports, Rule Section	Facility	987494	5272	973653	960901	Future Effective Date
Subpart									
L	Standards of Performance for Secondary Lead Smelters	260.123							
M	Standards of Performance for Secondary Brass and Bronze Ingot Production Plants	260.133							
O	Standards of Performance for Sewage Treatment Plants	260.154	260.153						
DD	Standards of Performance for Grain Elevators	260.303							
EE	Standards of Performance for Surface Coating Metal Furniture	260.313 260.316	260.314 260.315						
GG	Standards of Performance for Stationary Gas Turbines	260.335	260.334		X				
QQ	Standards of Performance for the Graphic Arts Industry: Publication Rotogravure Printing	260.433 260.435	260.434						
RR	Standards of Performance for the Pressure Sensitive Tape and Label Surface Coating Operations	260.444 260.446	260.445 260.447						
SS	Standard of Performance for the Industrial Surface Coating Large Appliances	260.453 260.456	260.454 260.455						
TT	Standards of Performance for Metal Coil Surface Coating	260.463 260.466	260.464 260.465						
BBB	Standards of Performance for the Rubber Tire Manufacturing Industry	260.543 260.547	260.544 260.545 260.546						
FFF	Standards of Performance for Flexible Vinyl and Urethane Coating and Printing	260.583	260.584 260.585						
JJJ	Standards of Performance for Petroleum Dry Cleaners								
SUBPART New Source Performance Standards (40 CFR 60)									
Cb, F	Portland Cement Plants								
Dc	Small Industrial -Commercial -Institutional Steam Generators >10 MM Btu but <100 MM Btu.								
Ea	Municipal Waste Combustors								
G	Nitric Acid Plants								
H & Cb	Sulfuric Acid Plants								

TITLE V APPLICATION
Applicable Requirements Summary Checklist (FORM 1401-H1) - continued

RULE	RULE DESCRIPTION	Test Method or Rule Section	Monitoring, Records, Reports, Rule Section	Facility	987494	5272	973653	1060901												Future Effective Date
Subpart																				
N	Oxygen Process Furnaces																			
Na	Oxygen Process Steelmaking Facilities																			
P	Primary Copper Smelters																			
Q	Primary Zinc Smelters																			
R	Primary Lead Smelters																			
S	Primary Aluminum Reduction Plants																			
T & U	Phosphate Fertilizer Industry																			
V,W,X	Phosphate Fertilizer Industry																			
Y	Coal Preparation Plants																			
Z	Ferroalloy Production Facilities																			
AA, AAa	Steel Plants																			
BB	Kraft Pulp Mills																			
CC	Glass Manufacturing Plants																			
HH	Lime Manufacturing Plants																			
KK	Lead-Acid Battery Manufacturing Plants																			
LL	Metallic Mineral Processing Plants																			
MM	Automobile and Light-Duty Truck Surface Coating Operations																			
NN	Phosphate Rock Plants																			
PP	Ammonium Sulfate Manufacture																			
UU	Asphalt Processing and Asphalt Roofing Manufacture																			
VV	Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry.																			
WW	Beverage Can Surface Coating Industry																			
XX	Bulk Gasoline Terminals																			
AAA	New Residential Wood Heaters																			
DDD	VOC Emissions from the Polymer Mfg. Ind. Equipment Leaks of VOC in Petroleum Refineries.																			
GGG																				

TITLE V APPLICATION
Applicable Requirements Summary Checklist (FORM 1401-H1) - continued

RULE	RULE DESCRIPTION	Test Method or Rule Section	Monitoring, Records, Reports, Rule Section	Facility	987494	5292	973653	9660901											Future Effective Date
Subpart																			
HHH	Synthetic Fiber Production Facilities																		
KKK, LLL	Onshore Natural Gas Processing: VOC Equipment Leaks and SO ₂ Emissions.																		
HHH	Synthetic Fiber Production Facilities																		
KKK, LLL	Onshore Natural Gas Processing: VOC Equipment Leaks and SO ₂ Emissions.																		
NNN	VOC Emissions from Synthetic Organic Chemical Manufacturing Industry Distillation Operations.																		
OOO	Standard of Performance for Nonmetallic Mineral Processing Plants																		
PPP	Wool Fiberglass Insulation Mfg. Plants																		
QQQ	VOC Emissions from Petroleum Refinery Wastewater Systems.																		
RRR	VOC Emissions from the Synthetic Organic Chemical Manufacturing Industry (SOCMI) Reactor Processes.																		
SSS	Magnetic Tape Coating Facilities																		
TTT	Industrial Surface Coating Surface, Surface Coating of Plastic Parts for Business Machines.																		
UUU	Calciners and Dryers in Mineral Industries.																		
VVV	Polymeric Coating of Supporting Substances Facilities.																		
WWW	Standards of Performance for Municipal Solid Waste Facilities																		
SUBPART	REGULATION XI - NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS (NESHAPS)																		
A	General Provisions																		
	Beryllium Extraction Plants; Ceramic Plants, Foundries, Incinerators, Propellant Plants, and Machine Shops that Process Beryllium Containing Material; and Rocket Motor Firing Test Sites.																		
C, D																			

TITLE V APPLICATION
Applicable Requirements Summary Checklist (FORM 1401-H1) - continued

RULE	RULE DESCRIPTION	Test Method or Rule Section	Monitoring, Records, Reports, Rule Section	Facility	987494	5272	973653	960901											Future Effective Date
Subpart																			
E	Mercury Ore Processing; Manufacturing Processes Using Mercury Chloralkali Cells; and Sludge Incinerators.																		
F	Ethylene Dichloride Mfg. Via Oxygen, HCl and Ethylene; Vinyl Chloride Mfg.; and Polyvinyl Chloride Mfg.																		
M	Asbestos Mills; Roadway Surfacing with Asbestos Tailings; Manufacture of Products Containing Asbestos; Demolition; Renovation; and Spraying and Disposal of Asbestos Waste.																		
SUBPART																			
B,Q,R,T,W,	NESHAPS (40 CFR 61) Underground Uranium Mines; Dept. of Energy Facilities; Phosphorus Fertilizer Plants; & Facilities Processing or Disposing of Uranium Ore & Tailings.																		
H,I,K	Dept. of Energy; Nuclear Regulatory Commission Licensed Facilities; Other Federal Facilities; and Elemental Phosphorus Plants. (Radionuclide)																		
J,L,Y, BB,FF	Fugitive Process, Storage, and Transfer Equipment Leaks; Coke By-Product Recovery Plants; Benzene Storage Vessels; Benzene Transfer Operations; and Benzene Waste Operations.																		
N,O,P	Glass Manufacturer; Primary Copper Smelter; Arsenic Trioxide and Metallic Arsenic Production Facilities.																		
V	Pumps, Compressors, Pressure Relief Devices, Connections, Valves, Lines, Flanges, Product Accumulator Vessels, etc. in VHAP Service.																		
SUBPART																			
F,G,H,I	MACT Standards (40 CFR 63) Amendment: Reopening, Averaging Issue																		
L	Coke Ovens																		
O	Ethylene Oxide Sterilizers																		
Q	Industrial Process Cooling Towers																		
R	Gasoline Distribution Facilities																		

TITLE V APPLICATION
Applicable Requirements Summary Checklist (FORM 1401-H1) - continued

RULE	RULE DESCRIPTION	Test Method or Rule Section	Monitoring, Reports, Rule Section	Facility	987494	5272	973653	1060901											Future Effective Date
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Subpart

T	Halogenated Solvent Cleaning Degreasing																		
X	Secondary Lead Smelters																		
Y	Marine Tank Loading/Unloading																		
CC	Petroleum Refineries																		
DD	Off-Site Waste and Recovery Operations																		
EE	Magnetic Tape																		
GG	Aerospace (Coatings)																		
II	Shipbuilding for Ship Repair (Surface Coating)																		
JJ	Wood Furniture Industry (Coatings)																		
KK	Printing and Publishing																		
AAAA	Municipal Solid Waste Landfills																		
DDDDD	Industrial, Commercial and Institutional Boilers and Process Heaters																		
MMMM	Surface Coating of Miscellaneous Metal Parts and Products																		
PPPP	Surface Coating of Plastic Parts																		
ZZZZ	Reciprocating Internal Combustion Engines																		
YYYY	Stationary Combustion Turbines																		

California Airborne Toxic Control Measures (ATCM)
17 CCR

§93102	Hexavalent Chromium ATCM for Chrome Plating and Chromic Acid Anodizing Operations																		
§93109	ATCM for Emissions of Perchloroethylene from Dry Cleaning Operations																		

	40 CFR Part 68 RMP																		
	Title IV - Acid Rain (40 CFR 72)																		

Title VI-Ozone Depleting Compounds (40 CFR 82)

B	Servicing of Motor Vehicle Air Conditioners		B																
F	Servicing of Other Air Conditioners		F																

**San Diego County Air Pollution Control District
10124 Old Grove Road San Diego CA 92131-1649
(858) 586-2600 FAX (858) 586-2601**

**TITLE V APPLICATION
Certification Statement (FORM 1401-I)**

Company Name	District Use Only
<u>Applied Energy LLC North Island</u>	NEDS # _____
Facility Address: <u>Quay and Rogers Road #370</u>	SITE ID # _____
<u>San Diego, CA 92135</u>	

Under penalty of perjury, identify the following: (Read each statement carefully and check each box for confirmation.)

Applicable Not
 Applicable

 Based on information and belief formed after reasonable inquiry, the source(s) identified in this application will continue to comply with the applicable requirement with which the source is in compliance. The applicable requirement(s) with which the source(s) is/are not in compliance is/are identified in Form 1401-L, Schedule of Compliance.

 Based on information and belief formed after reasonable inquiry, the source(s) identified in this application will comply with the future-effective applicable requirement(s) on a timely basis.

 Based on information and belief formed after reasonable inquiry, the source(s) identified in the Schedule of Compliance application form that is/are not in compliance with the applicable requirement(s), will comply in accordance with the attached compliance plan schedule.

 Based on information and belief formed after reasonable inquiry, information on application forms, referenced documents, all accompanying reports, and other required certifications are true, accurate, and complete.

 All fees required by Regulation III, Rule 40 have been paid.


Signature of Responsible Official

2-23-10
Date

David Sweigart
Print Name of Responsible Official

(858) 492-5470
Telephone No. of Responsible Official

General Manager
Title of Responsible Official

Boiler Multiple Applicable Requirements Streamlining

As noted on Form 1401-O, several applicable requirements can be streamlined for the boilers. Specifically, multiple requirements were identified pertaining to 1) the NOx emissions limit for the boilers, and 2) the sulfur content of the fuel for the boilers. The following is a discussion of the applicable requirements, determination of the most stringent emission limit and associated monitoring and recordkeeping requirements, and the proposed streamlined requirements.

Permit 973653 – 147.6 MMBTU/hr Boiler

1) NOx Emissions for Boilers

Step One: Identification of Multiple Requirements

SDAPCD Rule 69.2

SDAPCD NSR Permit

SDAPCD Rule 68

Step Two: Determine the Most Stringent NOx Emission Limit

SDAPCD Rule 69.2 (d)

30 ppmv @ 3% Oxygen

SDAPCD NSR Permit

9 ppmv @ 3% Oxygen when fired on natural gas

SDAPCD Rule 68

125 ppmv @ 3% Oxygen when fired on natural gas

Discussion: The SDAPCD NSR permit conditions have the most stringent NOx limit. The source will, therefore, be limited to the NSR permit limit of 9 ppmv @ 3% oxygen.

Step Three: Evaluate Work Practice Requirements

SDAPCD Rule 69.2: None

SDPACD NSR Permit: None

40 CFR Part 60, Subpart Db for Boilers: None

SDAPCD Regulation X, Subpart Db: None

SDAPCD Rule 68: None

Step Four: Evaluate Monitoring Requirements

SDAPCD Rule 69.2 (f) and (g)

Testing in accordance with ARB Test Method 100

Source testing at no less than 80% of the heat input rating

Source testing once every 12 months, with emissions based on a 15-minute sampling period

SDAPCD NSR Permit

NSR Permit references Rule 69.2 section (f) and (g)

Source testing on an annual basis

Source testing shall be performed at a load no less than 80% of the heat input

SDAPCD Rule 68 (f)

Testing in accordance with ARB Test Method 100

Discussion: Rule 69.2 and the NSR permit conditions are equivalent. Because the NSR permit conditions are the most stringent, these monitoring requirements will apply to the boiler.

Step Five: Evaluate Recordkeeping/Recording Requirements

SDAPCD Rule 69.2 (e)

Site shall install continuous monitoring of operational characteristics of the unit.

The owner or operator of any unit subject to this rule shall maintain all records required by Section (e) for a minimum of three calendar years. These records shall be maintained on the premises and made available to the District upon request.

SDAPCD NSR Permit

Permit references Rule 69.2 section (e)

SDAPCD Rule 68

Record hours of operation.

Discussion: The SDAPCD NSR permit shall be followed for all recordkeeping and recording requirements.

2) Sulfur Content of Fuel for Boilers

Step One: Identification of multiple requirements:

PUC Rule
SDAPCD Rule 62

Step Two: Determining most stringent S fuel content limit

PUC Rule

0.75 grains of sulfur compounds per 100 ft³ of dry gaseous fuel

Rule 62: 10 grains S/100 ft³ as H₂S or 0.5 percent S by weight

Discussion: The PUC rule has the most stringent requirements. The boilers will be limited to 0.75 grains of sulfur compounds per 100 ft³ of dry gaseous fuel. The requirements from SDAPCD Rule 62 are subsumed.

Step Three: Evaluate work practice requirements

PUC Rule: None

SDAPCD Rule 62: None

Step Four: Evaluate monitoring requirements

PUC Rule:

San Diego Gas and Electric will monitor the gas quality on a daily basis.

SDAPCD Rule 62:

None

Discussion: San Diego Gas and Electric monitor fuel gas sulfur content.

Step Five: Evaluate recordkeeping and reporting requirements

PUC Rule:

San Diego Gas and Electric will provide monthly reports on gas quality to the facility upon request.

SDAPCD Rule 62:

None

Discussion: The reports compiled by San Diego Gas and Electric will be used as recordkeeping for the boilers.

COMBUSTION TURBINE WITH DUCT BURNER STREAMLINING

As noted on Form 1401-H, several applicable requirements can be streamlined for the gas turbine and duct burner. Specifically, multiple requirements were identified pertaining to 1) the NO_x emissions limit for the combustion turbine, 2) the NO_x emissions limit for the duct burner, 3) the SO_x emissions limit for the combustion turbine, and 4) the sulfur content of the fuel for the combustion turbine. The following is a discussion of the applicable requirements, determination of the most stringent emission limit and associated monitoring and recordkeeping requirements, and the proposed streamlined requirements.

1) NO_x Emissions from Combustion Turbine

Step One: Identification of multiple requirements:

- a) SDAPCD Rule 69.3
- b) 40 CFR Part 60, Subpart KKKK For Stationary Gas Turbines
- c) SDAPCD Rule 20.2, New Source Review, Permit No. 987633

Step Two: Determining most stringent NO_x emission limit

- a) Rule 69.3: 42 ppmvd @ 15% O₂
- b) 40 CFR Part 60, Subpart KKKK: 25 ppmvd @ 15% O₂
- c) SDAPCD Rule 20.2, New Source Review: 2.0 ppmvd @ 15% O₂

Discussion: Based on the emission limits, NSR Permit Limit of 2.0 ppmvd @ 15% O₂ is the most stringent limit and therefore the streamlined requirement. The other emission limits are subsumed.

Step Three: Evaluate work practice requirements

- a) Rule 69.3: None
- b) 40 CFR Part 60, Subpart KKKK: None
- c) SDAPCD Rule 20.2, New Source Review; Permit No. 987633
 - a. Condition 28: When the combustion turbine is operating, ammonia shall be injected at all times that the associated SCR catalyst inlet temperature is 650 degrees Fahrenheit or greater.

Discussion: The streamlined work practice requirements will be the work practices associated with the most stringent NO_x emission limit in the NSR permit. The work

practices contained in the NSR permit are considered to be the streamlined requirements. Any other work practice requirements are subsumed.

Step Four: Evaluate monitoring requirements

- a) Rule 69.3: Continuous monitoring for operational characteristics of the unit and NO_x reduction system.
- b) 40 CFR Part 60, Subpart KKKK: Either annual source testing for NO_x, or continuous emission monitoring of NO_x and O₂ to determine NO_x emission rates in ppm or lbs/MMBTU.
- c) Rule 20.2, New Source Review, Permit No. 987633: Continuous emission monitoring of NO_x and O₂ to determine NO_x emission rates in ppm or lbs/MMBTU.

Discussion: The continuous emission monitoring requirements for the CEMS in the NSR permit conditions are considered to be the streamlined requirements as they are associated with the most stringent emission limit. The other requirements are subsumed.

Step Five: Evaluate recordkeeping and reporting requirements

- a) Rule 69.3: Operating log and general recordkeeping
- b) 40 CFR Part 60, Subpart KKKK: Quarterly reporting requirements to EPA as required under 40 CFR 60.4(b). Recordkeeping and reporting of excess emissions and monitor downtime in accordance with 40 CFR 60.7(c) for units subject to continuous monitoring requirements.
- c) Rule 20.2, New Source Review, Permit No. 987633: Reports shall be submitted in accordance with the requirements of SDAPCD Rule 19.2, Sections (D), (E), (F) (2-5), and a CEMS Protocol approved by the District. Rule 19.2 requirements are as follows:
 - a. Occurrence and duration of any startup, shutdown, or malfunction in the operation of the facility.
 - b. Performance testing, evaluations, calibrations check, adjustments, and maintenance of any CEMS.
 - c. Emission measurements.
 - d. Quarterly reports.
- d) 40 CFR Part 70, Title V: Semi-annual compliance reporting.

Discussion: The recordkeeping and reporting requirements in the NSR permit are the most stringent and therefore are the streamlined requirements. The other requirements are subsumed.

2) NOx Emissions from Duct Burner

Step One: Identification of multiple requirements:

- a) SDAPCD Rule 68
- b) SDAPCD Rule 20.2, New Source Review, Permit No. 987633

Step Two: Determining most stringent NOx emission limit

- a) Rule 68: 125 ppmvd @ 15% O₂
- b) Rule 20.2, New Source Review: 2.0 ppmvd @ 15% O₂

Discussion: Based on the emission limits, NSR Permit Limit of 2.0 ppmvd @ 15% O₂ is the most stringent limit and therefore the streamlined requirement. The emissions from the duct burner combine with the emissions from the gas turbine and are exhausted through a common stack. The duct burner operation only occurs when the turbine is in operation. When the turbine is in operation, the SCR system is also in operation to meet the emission limit of the NSR permit. The other emission limit is subsumed.

Step Three: Evaluate work practice requirements

- a) Rule 68: None
- b) SDAPCD Rule 20.2, New Source Review, Permit No. 987633: None

Step Four: Evaluate monitoring requirements

- a) Rule 68: None
- b) Rule 20.2, New Source Review, Permit No. 987633: Continuous emission monitoring of NOx and O₂ to determine NOx emission rates in ppm or lbs/MMBTU.

Discussion: Rule 68 has no monitoring requirements for the duct burner. The monitoring requirements specified in the NSR permit are for the combined operation of the turbine and duct burner and will serve as the streamlined requirements since these are associated with the more stringent emission limit.

Step Five: Evaluate recordkeeping and reporting requirements

- a) Rule 68: Operating log and general recordkeeping
- b) Rule 20.2, New Source Review: None

Discussion: The NSR permit has no specific recordkeeping and reporting requirements for the duct burner itself. The NSR permit does require operation of the CEMS and source testing for combined emissions during operation of the duct burner. The recordkeeping and reporting requirements in the NSR permit provide the necessary requirements for monitoring of the duct burner emissions and are the most stringent and therefore are the streamlined requirements. The other requirements are subsumed.

3) SO_x Emissions from Combustion Turbine

Step One: Identification of multiple requirements:

- a) SDAPCD Rule 53
- b) 40 CFR Part 60, Subpart KKKK for Stationary Gas Turbines
- c) SDAPCD Rule 20.2, New Source Review, Permit No. 987633

Step Two: Determining most stringent SO_x emission limit

- a) Rule 53: 0.05 percent dry volume
- b) 40 CFR Part 60, Subpart KKKK: 0.90 lbs SO₂/MWh gross output; 0.06 lbs SO₂/MMBTU
- c) Rule 20.2, New Source Review: PUC quality gas (0.75 grains S/100 ft³)

Discussion: Based on the emission limits, the NSR permit limit of PUC quality gas with no more than 0.75 grains S/100 ft³ (equivalent to 0.002 lbs SO₂/MMBTU) is the most stringent emission limit, and the other emission limits will be satisfied with use of PUC quality gas. The other emission limits are subsumed.

Step Three: Evaluate work practice requirements

- a) Rule 53: None
- b) 40 CFR Part 60, Subpart KKKK: None
- c) SDAPCD Rule 20.2, New Source Review, Permit No. 987633: None

Step Four: Evaluate monitoring requirements

- a) Rule 53: None
- b) 40 CFR Part 60, Subpart KKKK: Either monitor total sulfur content of the fuel combusted in the turbine, or demonstrate through a valid fuel purchase

contract or other demonstration that the fuel does not exceed 20 grains S/100 ft³, or 0.06 lbs SO₂/MMBTU.

- c) SDAPCD Rule 20.2, New Source Review, Permit No. 987633: Maintain quarterly records of fuel sulfur content.

Discussion: Rule 53 has no monitoring requirements. The monitoring requirements specified in the NSR permit are for the sulfur content of the fuel are associated with the most stringent emissions limit and are therefore the streamlined requirements. The demonstration can be made through contract or demonstration that PUC-quality natural gas is combusted exclusively in the combustion turbine.

Step Five: Evaluate recordkeeping and reporting requirements

- a) Rule 53: None
- b) 40 CFR Part 60, Subpart KKKK: Demonstrate that sulfur content of fuel meets requirements.
- c) SDAPCD Rule 20.2, New Source Review, Permit No. 987633: Provide records of fuel sulfur content upon request.

Discussion: Rule 53 has no requirements for recordkeeping. The NSR permit requirements for fuel sulfur content are the most stringent and therefore are the streamlined requirements. The other requirements are subsumed.

4) Sulfur Content of Fuel for Combustion Turbine

Step One: Identification of multiple requirements:

- a) SDAPCD Rule 62
- b) 40 CFR Part 60, Subpart KKKK for Stationary Gas Turbines
- c) SDAPCD Rule 20.2, New Source Review, Permit No. 987633

Step Two: Determining most stringent S fuel content limit

- a) Rule 62: 10 grains S/100 ft³ as H₂S or 0.5 percent S by weight
- b) 40 CFR Part 60, Subpart KKKK: 20 grains S/100 ft³
- c) Rule 20.2, New Source Review: PUC quality gas (0.75 grains S/100 ft³)

Discussion: Based on the emission limits, the NSR permit limit of PUC quality gas with no more than 0.75 grains S/100 ft³ is the most stringent emission limit, and the other emission limits will be satisfied with use of PUC quality gas. The other emission limits are subsumed.

Step Three: Evaluate work practice requirements

- a) Rule 62: None
- b) 40 CFR Part 60, Subpart KKKK: None
- c) SDAPCD Rule 20.2, New Source Review, Permit No. 987633: None

Step Four: Evaluate monitoring requirements

- a) Rule 62: None
- b) 40 CFR Part 60, Subpart KKKK: Either monitor total sulfur content of the fuel combusted in the turbine, or demonstrate through a valid fuel purchase contract or other demonstration that the fuel does not exceed 20 grains S/100 ft³, or 0.06 lbs SO₂/MMBTU.
- c) SDAPCD Rule 20.2, New Source Review, Permit No. 987633: Maintain quarterly records of fuel sulfur content.

Discussion: Rule 62 has no monitoring requirements. The monitoring requirements specified in the NSR permit are for the sulfur content of the fuel are associated with the most stringent emissions limit and are therefore the streamlined requirements. The demonstration can be made through contract or demonstration that PUC-quality natural gas is combusted exclusively in the combustion turbine.

Step Five: Evaluate recordkeeping and reporting requirements

- a) Rule 62: None
- b) 40 CFR Part 60, Subpart KKKK: Demonstrate that sulfur content of fuel meets requirements.
- c) SDAPCD Rule 20.2, New Source Review, Permit No. 987633: Provide records of fuel sulfur content upon request.

Discussion: Rule 62 has no requirements for recordkeeping. The NSR permit requirements for fuel sulfur content are the most stringent and therefore are the streamlined requirements. The other requirements are subsumed.

**San Diego County Air Pollution Control District
10124 Old Grove Road San Diego CA 92131-1649
(858) 586-2600 FAX (858) 586-2601**

**TITLE V APPLICATION
Permit Shield (FORM 1401-Q)**

Company Name <u>Applied Energy LLC North Island</u>	District Use Only
Facility Address: <u>Quay and Rogers Road #370, San Diego, CA 92135</u>	NEDS # _____
	SITE ID # _____

REQUEST FOR PERMIT SHIELD

If more space is required, use additional forms. Please type or print legibly.

Application No(s) Permit No(s)	Requirements to be Shielded	Basis	Attachment Number
960392	SDAPCD Regulation IV, Rules 52 and 54	Not applicable to source	
960392	SDAPCD Regulation IX	Not applicable to source	
960392	40 CFR Part 61	Not applicable to source	
960392	40 CFR Part 63	Not applicable to source	
960392	SDCAPCD Regulation X, Subpart Kb	Not applicable to source	
000639	SDAPCD Rule 69.2	Not applicable to equipment	
000639	NSPS Subpart Db	Not applicable to equipment	
000639	40 CFR 60 Appendix F	Not applicable to equipment	
000639	Enforcement Action on Rule 53, 62, 68, 69.3	Monitoring, recordkeeping and reporting requirements	
000639	Enforcement Action on NSPS Subpart GG	Monitoring, recordkeeping and reporting requirements	
000639	Enforcement Action on 40 CFR 60.4(B) and 60.7(C)	Monitoring, recordkeeping and reporting requirements	
000639	Rule 53, 62, 69.3, NSPS Subpart GG	Permit conditions enforceable	
973653	Enforcement action on Rule 53, Rule 62, Rule 68, Rule 69.2d	Permit conditions enforceable	
973653	Enforcement action on NSPS Subpart Db	Permit conditions enforceable	



San Diego Gas & Electric

PO BOX 1831 • SAN DIEGO, CA 92112 • 619/696-2000

October 27, 1989

Mr. James M. Hinrichs
General Manager - Western Operations
Energy Factors
401 B Street Suite 1000
San Diego, CA 92101-4219

FILE NO.

QFA 400.223

Subject :: Firm Capacity Test Results for North Island

Dear Jim:

Congratulations on your successful completion of the 15 day firm capacity test for North Island. After reviewing the 15 minute data for the test ending October 20, 1989 at 2200 hours, we agree to amend the Long Run Standard Offer for Power Purchase and Interconnection from Qualifying Facilities dated March 29, 1985 between SDG&E and Energy Factors (S04). This Agreement was subsequently assigned to Applied Energy, Incorporated as of July 26, 1988.

The Parties mutually agree to the following revision to the S0#4 in order to set the Firm Capacity Amount:

<u>Section</u>	<u>Revision</u>
1.3.6.3.1	33,500 kw

Please have the appropriate person at AEI execute both originals of this document and return one original to me.

Sincerely,

David J. Hermanson
Power Contracts Administrator
Customer Energy Contracts

Approved and Accepted for
Applied Energy Incorporated by:

Signature

JAMES S. THOMSON
VICE PRESIDENT - OPERATIONS
Printed Name

Title

EF115.Ltr

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STANDARD OFFER NO. 4

LONG RUN STANDARD OFFER FOR POWER PURCHASE

AND INTERCONNECTION

FROM QUALIFYING FACILITIES

WITH

ENERGY FACTORS, INCORPORATED

NORTH ISLAND COGENERATION PROJECT

Transaction No.

VAULT COPY

PART III

PURCHASE PROVISIONS - ENERGY

3.1 METHOD OF PURCHASE AND SALE

3.1.1 All Energy delivered to SDG&E at the Point of Delivery and registered by the Meters located thereat shall be provided according to the option described below and selected in Section 1.3.4:

3.1.1.1 Simultaneous Purchase And Sale

Seller shall sell and deliver to SDG&E the total Plant output, minus Station Load, to the Point of Delivery. Seller shall purchase from SDG&E all energy used by Seller for its own consumption.

3.1.1.2 Sale of Surplus Energy

Seller shall sell and deliver to SDG&E at the Point of Delivery any Surplus Energy generated by the Plant. Seller shall purchase from SDG&E any energy required for Seller's own consumption.

3.1.2 All Energy delivered to SDG&E by Seller shall be metered according to time-of-use metering at Seller's expense.

3.1.3 Seller shall not be allowed to convert between 3.1.1.1 and 3.1.1.2 during the Forecast Period as selected and specified in either Sections 3.3, 3.4, or 3.5.

1 3.1.4 Except as provided in Section 3.1.3,
2 Seller shall have the ability to convert between the options
3 specified in Section 3.1.1 commencing at the end of the
4 Forecast Period, provided that the Seller gives SDG&E a
5 minimum of sixty (60) days advance written notice prior to
6 the desired date of such conversion. Seller may not convert
7 more than once in any 12 month period. Any and all costs
8 incurred by SDG&E as a result of any such conversion shall
9 be paid by the Seller within thirty (30) days of receipt of
10 notice from SDG&E of the amount of such costs. In addition,
11 the cost of SDG&E Facilities and Line Extension Facilities
12 upon which the monthly O&M charge is based shall be adjusted
13 to reflect the costs of such conversion. SDG&E shall not be
14 required to remove or reserve capacity of the Intercon-
15 nection Facilities or Line Extension Facilities made idle by
16 Seller's energy sale conversion except as provided in
17 SDG&E's Electric Department Rule 21 and may use such facili-
18 ties at any time to serve other customers or to interconnect
19 with other electric power sources as provided in SDG&E's
20 Electric Department Rule 21.

21 3.1.5 If the option described in Section 3.1.4
22 is exercised, then termination provisions (as described in
23 Section 4.4.8) shall apply to the amount by which the Firm
24 Capacity is reduced as a result of such conversion.

25 3.1.6 SDG&E shall process a request by Seller
26 to convert between the Options specified in Section 3.1.1
27 and act to institute any changes made necessary by such
28 request as expeditiously as possible. Seller acknowledges

1 that other demands on SDG&E resources may delay such changes
2 beyond the desired dated of conversion. The conversion
3 shall be effective on the later of (i) the desired date of
4 conversion, or (ii) the date SDG&E notifies Seller that all
5 changes necessary to accommodate such conversion have been
6 completed.

7 3.2 ENERGY PAYMENT OPTIONS

8 3.2.1 Seller may choose between three (3)
9 Energy Payment Options whose terms are specified below,
10 except that Option B is not available to oil or gas
11 Cogeneration Facilities. Seller shall comply with each and
12 every term of the option selected. The three (3) energy
13 options available are:

- 14 (i) Energy Payment Option A
15 (Forecast Energy Payment-
Section 3.3)
- 16 (ii) Energy Payment Option B
17 (Levelized Forecast Energy
Payment-Section 3.4)
- 18 (iii) Energy Payment Option C
19 (Incremental Energy Rate-
Section 3.5).

20 The Option applicable for this Agreement is specified in
21 Section 1.3.5.

22 3.2.2 Upon written notice to SDG&E, Seller may
23 convert between Options A and B at any time prior to ninety
24 (90) days before the Operation Date set forth in Section
25 1.3.1.5; provided, however, that the percentage weighting of
26 actual short-run avoided cost shall not be allowed to
27 change.

28



0420
NE

March 20, 1990

Mr. James M. Hinrichs
General Manager, Western Operations
The Sithe/Energies Group
401 B Street
Suite 1000
San Diego, CA 92101-4219

QFA 400.223

Dear Jim:

Subject : Purchase of Generation above Nameplate Rating at North Island

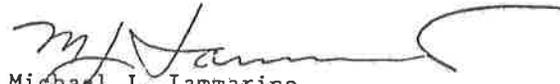
We have reviewed and agreed with your request that SDG&E purchase AEI's generation above the Nameplate Rating at Standard Offer No. 1 energy and as-available capacity prices.

Upon your execution and return of one original, this letter agreement will serve to amend the Standard Offer No. 4, Long Run Standard Offer for Power Purchase and Interconnection from Qualifying Facilities between Applied Energy, Inc. and SDG&E for the North Island Cogeneration Project dated March 29, 1985 (S04). The S04 is amended as follows:

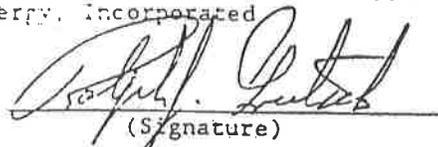
All energy and as-available capacity generated by the existing Plant at levels greater than the Nameplate Rating of 34,500 kw identified in Section 1.3.11 shall be purchased by SDG&E at SDG&E's quarterly filed energy and as-available capacity prices.

This amendment shall have an effective date of December 1, 1989. Neither the S04 nor this amendment are intended to address any modifications or additions to the existing Plant.

Sincerely,


Michael J. Iammarino
Supervisor
Customer Energy Contracts

Accepted and Agreed to for Applied
Energy, Incorporated

By 
(Signature)

Ralph J. Grutsch
(Name Printed)

President
(Title)

MJI:DJH/ea
SEG2.Ltr