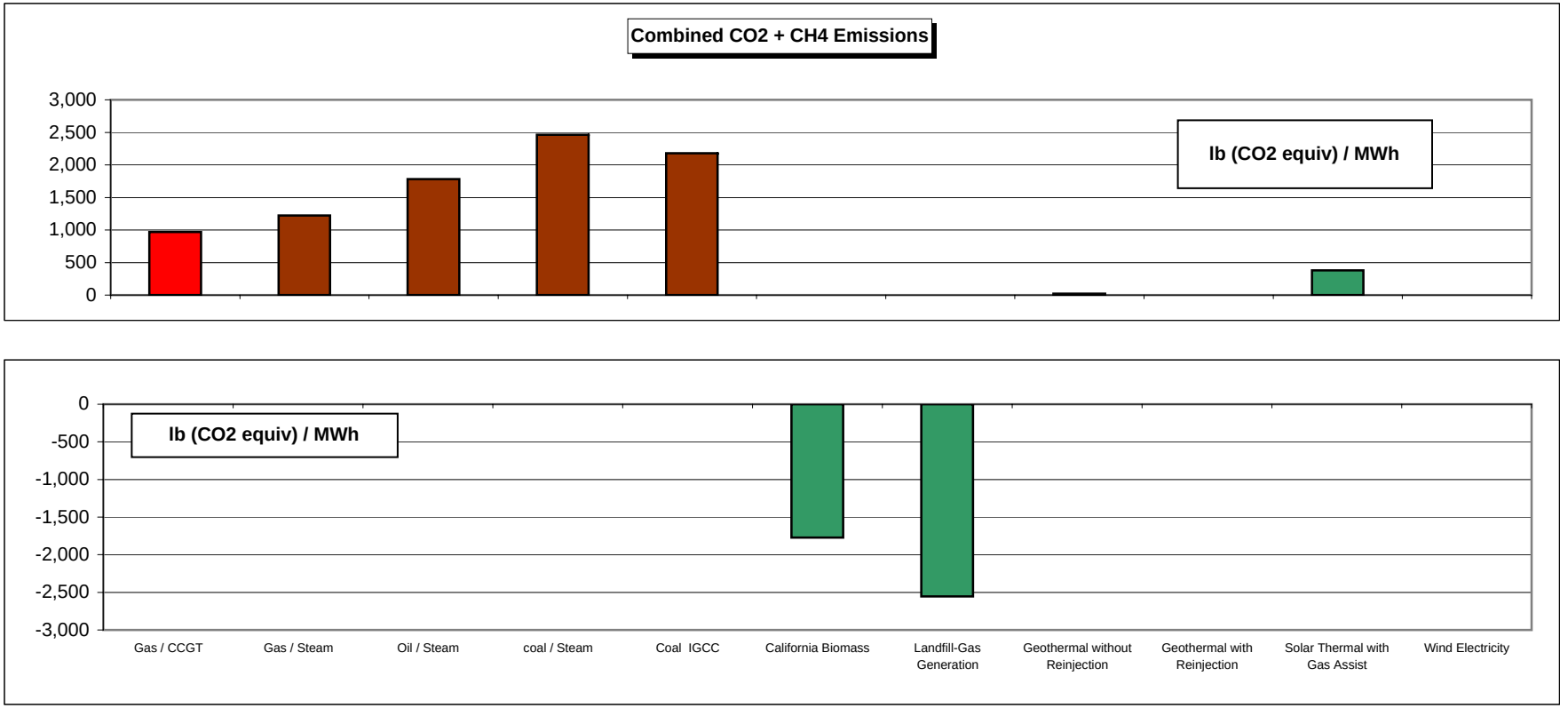
FIGURE 1

SUMMARY OF NET EMISSIONS COMPARISON DATA FOR RENEWABLES

FIGURE 1: NET EMISSIONS COMPARISON DATA

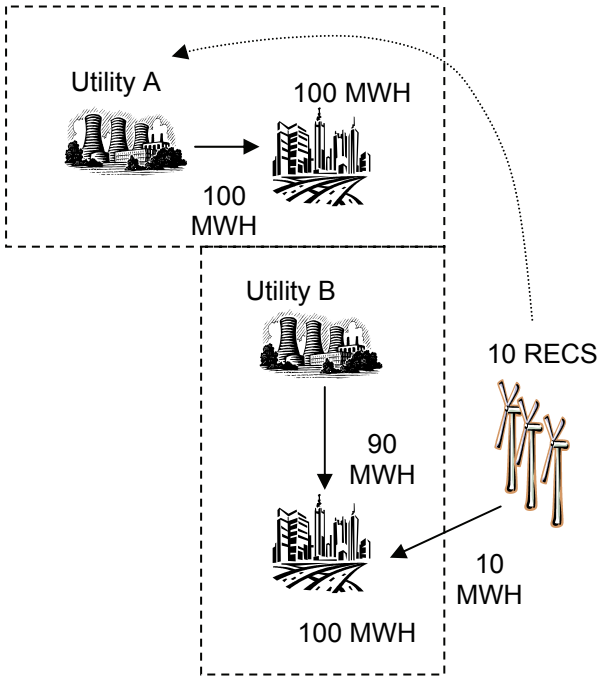


Source: Attachment 6

FIGURE 2

SIMPLE ILLUSTRATION OF REC TRADING

Figure 2: Simple Illustration of REC Trading



As indicated in this Figure, Utility B is procuring 10 MWs of power from a renewable resource, but does not need that amount to meet its RPS requirement, so it sells off the renewable energy credits (RECs) to Utility A. Now the RPS requirement is met in each service territory, even though more of the renewable generation is located in service territory B.

ATTACHMENT 1

LIST OF ABBREVIATIONS AND ACRONYMS

ATTACHMENT 1
Page 1

LIST OF ABBREVIATIONS AND ACRONYMS

AB	Assembly Bill
ACR	Assigned Commissioner's Ruling
ALJ	Administrative Law Judge
AReM	Alliance for Retail Energy Markets
Btu	British thermal unit
CAC	Cogeneration Association of California
Calpine	Calpine Corporation
CARB	California Air Resources Board
CATR	Climate Action Team Report
CCC	California Cogeneration Council
CCGT	combined-cycle gas turbine
CEC	California Energy Commission
CE Council	Community Environmental Council
CEED	Center for Energy and Economic Development
CEMS	Continuous Emissions Monitoring System
CMUA	California Municipal Utilities Association
CO_2	carbon dioxide
Constellation	Constellation Energy Group
D.	Decision
DRA	Division of Ratepayer Advocates
EAP	Energy Action Plan
e.g.	*exempli gratia*, meaning "for example"
EPS	emissions performance standard
EPUC	Energy Producers and Users Coalition
et al.	*et alii,* meaning "and other people"
EVA	Energy Ventures Analysis, Inc.
Ex.	Exhibit
FERC	Federal Energy Regulatory Commission
final report	Final Workshop Report: Interim Emissions Performance Standard Program Framework
GCPA	Global Climate Protection Act of 1987
GHG	Greenhouse gas
GHG Policy Statement	Policy Statement on GHG Performance Standards

ATTACHMENT 1
Page 2

LIST OF ABBREVIATIONS AND ACRONYMS

GPI	Green Power Institute
Ibid.	*Ibidem*, meaning "in the same place"
Id.	*Idem,* meaning "the same"
i.e.	*id est,* meaning "that is"
IEP	Energy Producers Association
IGCC	Integrated Gasification Combined Cycle
"Interim EPS Rules"	interim emissions performance standard rules
ISO	Independent System Operator
kWh	kilowatt-hour
lbs	pounds
LNG	liquefied natural gas
LSEs	load-serving entities
LS Power	LS Power Generation
LTPPs	long-term procurement plans
mimeo.	mimeograph
MMBtus	million British thermal units
MW	megawatt
MWh	megawatt-hour
NRDC	Natural Resources Defense Council
OII	Order Instituting Investigation
p.	page
PG&E	Pacific Gas and Electric Company
Plumas-Sierra	Plumas-Sierra Rural Electric Cooperative
pp.	pages
PURPA	Public Utility Regulatory Policies Act of 1978
QF	qualifying facility
QFs	qualifying facilities
R.	Rulemaking
RD&D	Research, development and demonstration
RECs	renewable energy credits
Registry	California Climate Action Registry
RFOs	Requests for Offers
RPS	Renewable Portfolio Standard

ATTACHMENT 1
Page 3

LIST OF ABBREVIATIONS AND ACRONYMS

SB	Senate Bill
SCE	Southern California Edison Company
SDG&E	San Diego Gas & Electric Company
Sempra	Sempra Global
Sierra Pacific	Sierra Pacific Power Company
SoCalGas	Southern California Gas Company
"Staff" or "Commission Staff"	Staff of the Division of Strategic Planning
TURN	The Utility Reform Network
UCS	Union of Concerned Scientists
v.	versus
WECC	Western Energy Coordinating Council
WRA	Western Resource Advocates

(END OF ATTACHMENT 1)

ATTACHMENT 2

FLOWCHART OF INTERIM GHG EMISSIONS PERFORMANCE STANDARD

Attachment 2
Flow Chart of Interim GHG Emissions Performance Standard

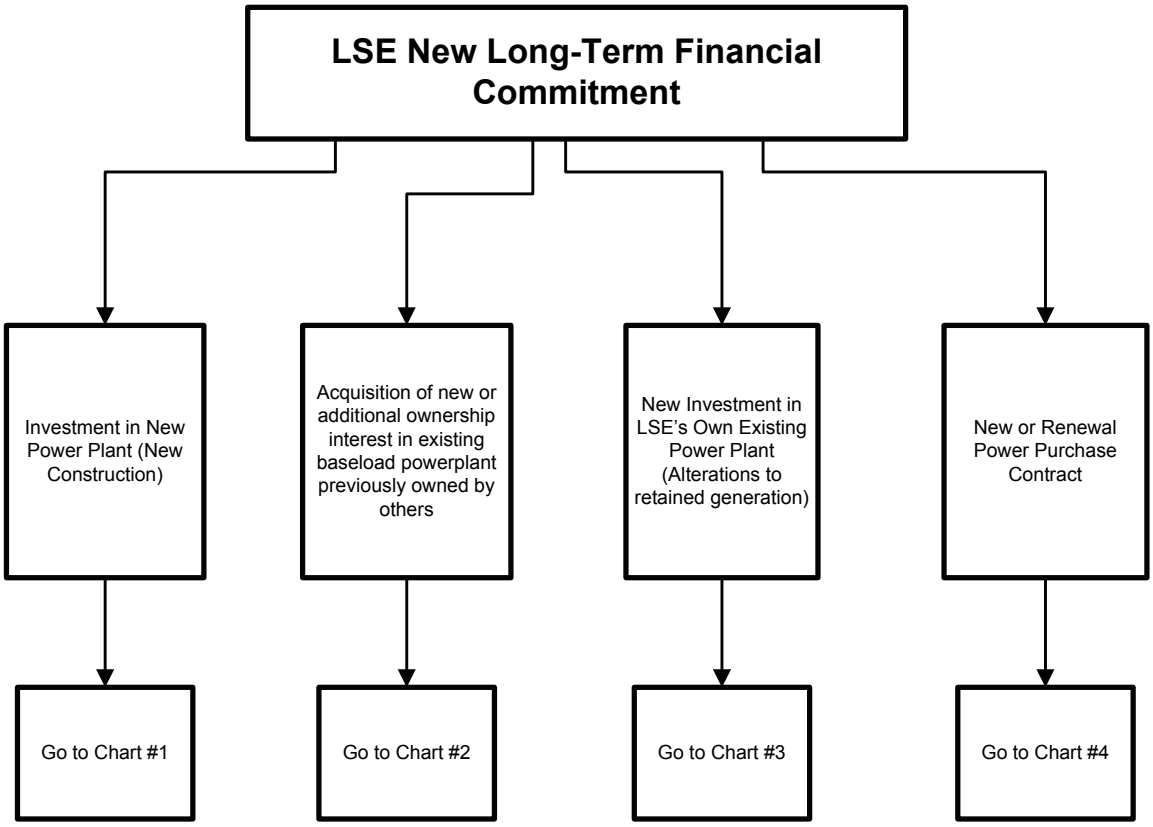
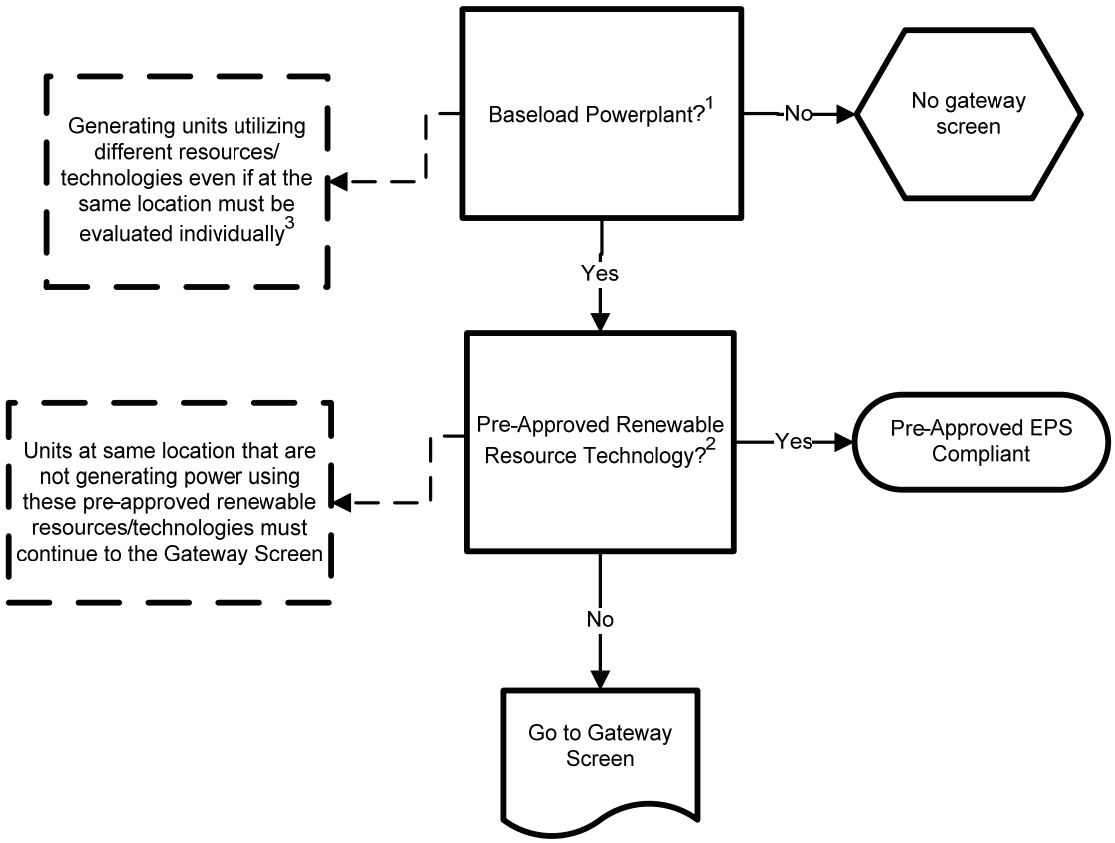


Chart #1
LSE Investment in New Power Plant (New Construction)

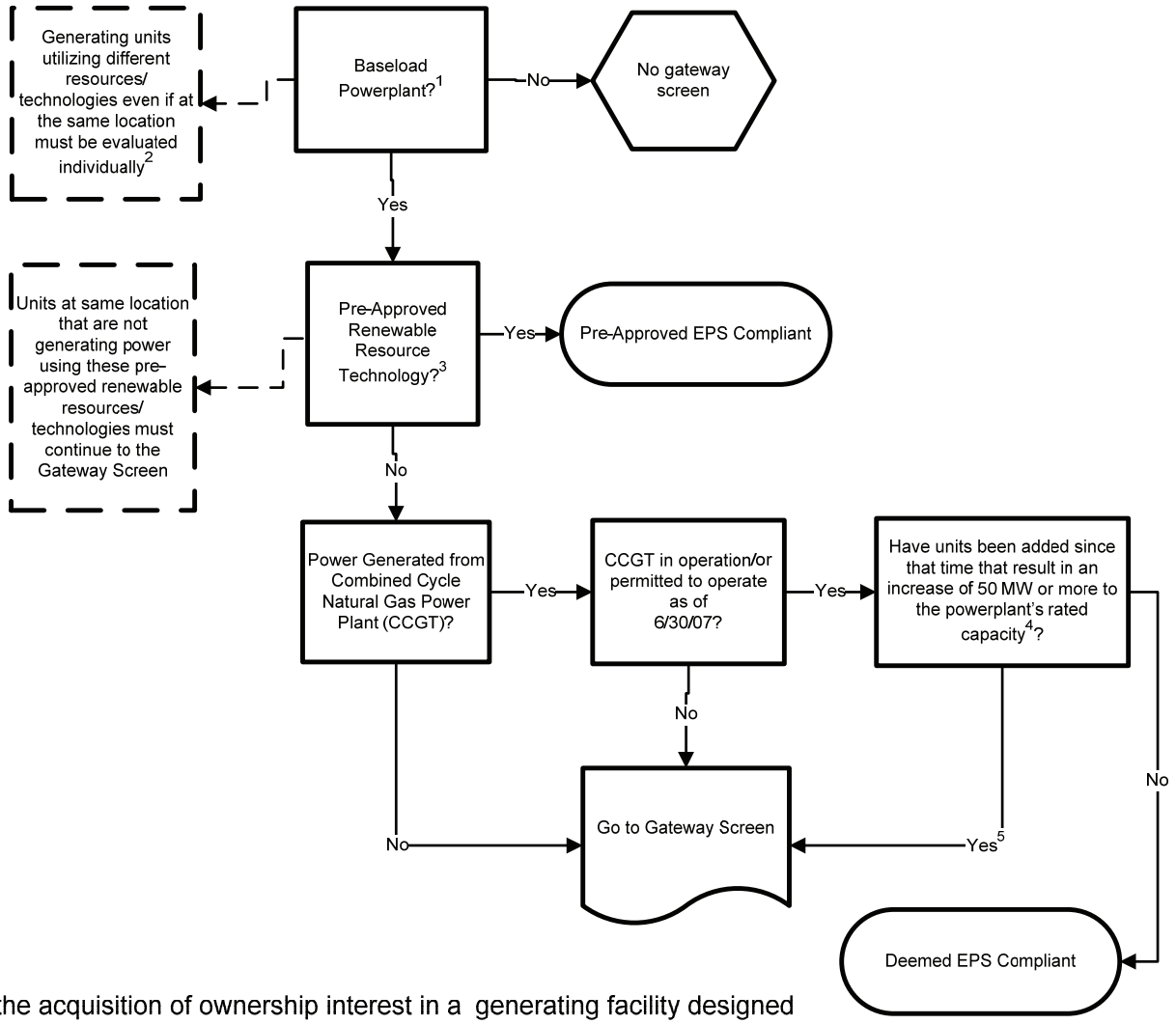


[1] Is the investment being made to a generating facility designed and intended to provide electricity at an annualized capacity factor of 60% or greater?

[2] Pre-approved technologies include: Solar thermal electric (with up to 25% gas heat assist); wind; geothermal (with or without reinjection); generating facilities using biomass (e.g. agricultural and wood waste, landfill gas) that would otherwise dispose of the biomass utilizing open burning, forest accumulation, landfill (uncontrolled, flare, or engine), spreading or composting

[3] See Rules on what constitutes a "multi-unit" powerplant.

Chart #2
LSE Acquisition of New or Additional Ownership Interest in Existing Baseload Powerplant Previously Owned by Others



[1] Is the acquisition of ownership interest in a generating facility designed and intended to provide electricity at an annualized capacity factor of 60% or greater?

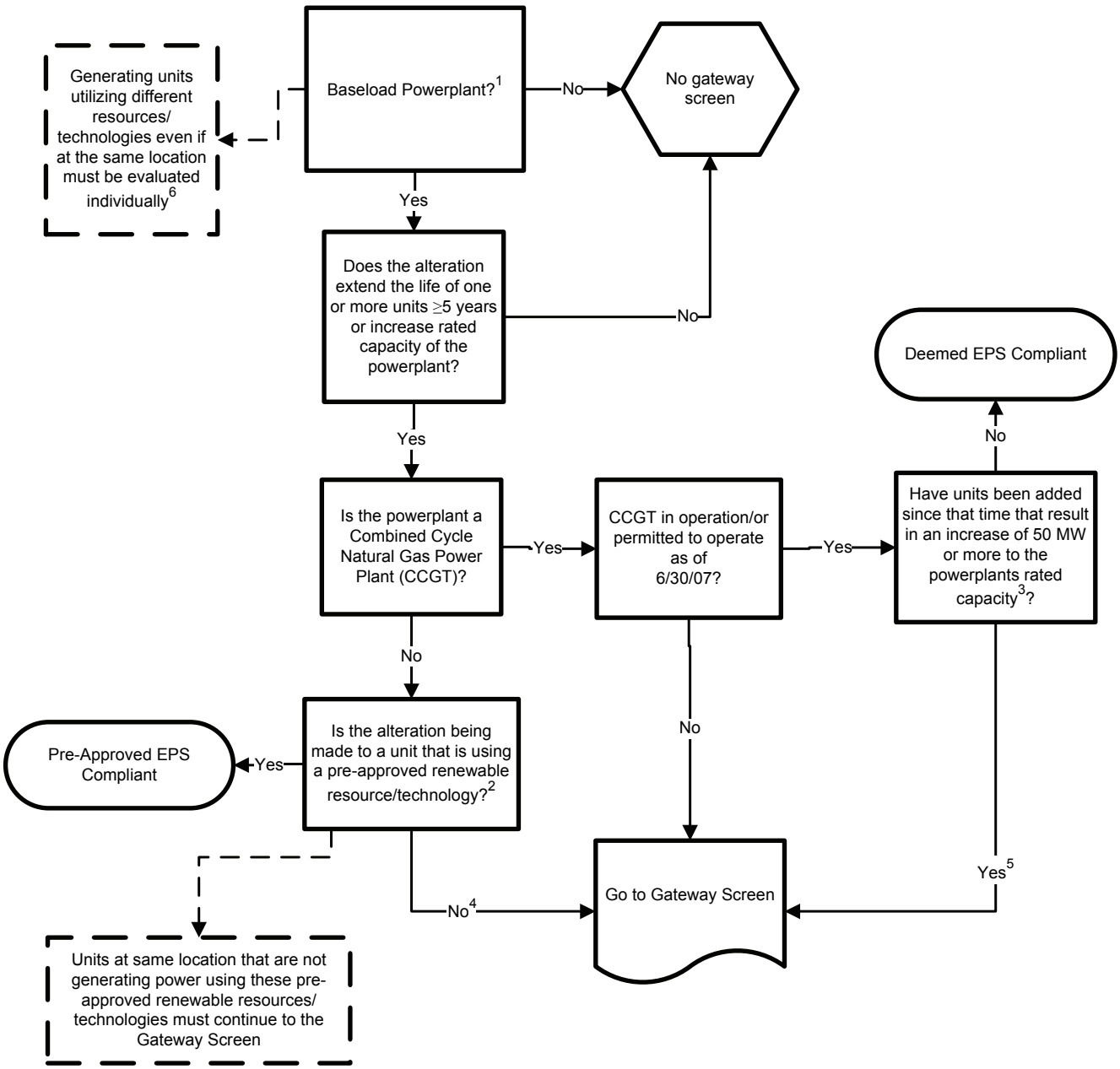
[2] See Rules on what constitutes a "multi-unit" powerplant.

[3] Pre-approved technologies include: Solar thermal electric (with up to 25% gas heat assist); wind; geothermal (with or without reinjection); generating facilities using biomass (e.g. agricultural and wood waste, landfill gas) that would otherwise be disposed of utilizing open burning, forest accumulation, landfill (uncontrolled, gas collection with flare or engine), spreading or composting.

[4] The rated capacity of CCGTs for the purpose of establishing when the 50MW addition is reached will be: 1) for all CCGT plants that are in operation on the effective date of this decision – the rated capacity of the plant that is operating, or 2) for all other CCGT plans (or additions to plants) that obtain a CEC final permit to operate as of June 30, 2007 – the rated capacity authorized by the permit.

[5] Only the units that have been added must comply with the EPS

Chart #3
LSE New Investment in its Own Existing Powerplant
(Alterations to Retained Generation)



Please see footnotes on next page

Chart #3
LSE New Investment in its Own Existing Powerplant (Alterations to Retained Generation)

Footnotes

[1] Is the investment being made to a generating facility designed and intended to provide electricity at an annualized capacity factor of 60% or greater? Or is the investment being made to a non-baseload generating facility so that it is now designed and intended to provide electricity at an annualized capacity factor of 60% or greater?

[2] Pre-approved technologies include: Solar thermal electric (with up to 25% gas heat assist); wind; geothermal (with or without reinjection); generating facilities using biomass (e.g. agricultural and wood waste, landfill gas) that would otherwise be disposed of utilizing open burning, forest accumulation, landfill (uncontrolled, gas collection with flare or engine), spreading or composting.

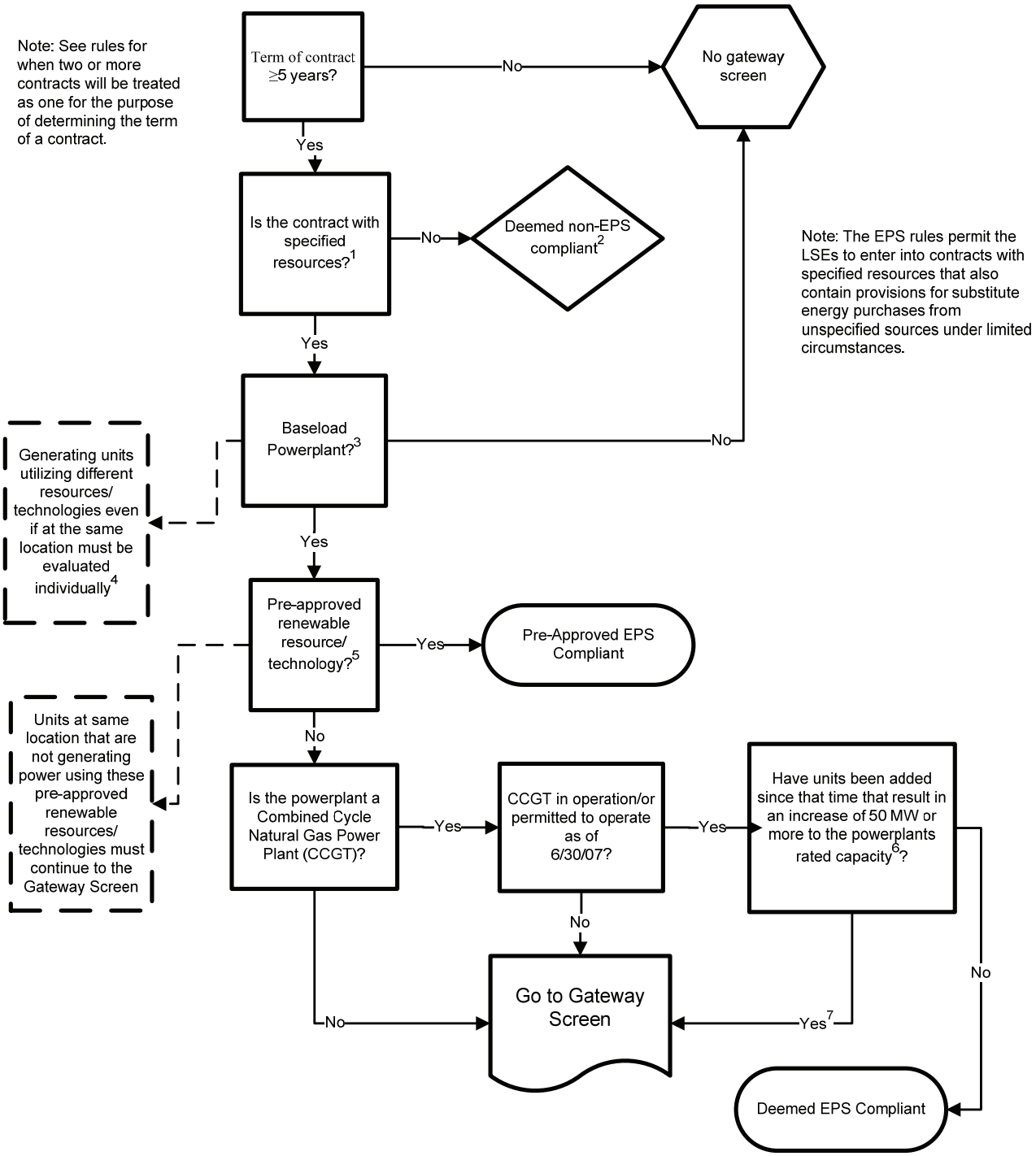
[3] The rated capacity of CCGTs for the purpose of establishing when the 50MW addition is reached will be: 1) for all CCGT plants that are in operation on the effective date of this decision – the rated capacity of the plant that is operating, or 2) for all other CCGT plans (or additions to plants) that obtain a CEC final permit to operate as of June 30, 2007 – the rated capacity authorized by the permit.

[4] Only those units that are being added, replaced or altered must comply with the EPS. In any event, additional units may be considered separate "new" powerplants, based on the EPS rules, to be evaluated under Chart #1.

[5] Only those units that have been added must comply with the EPS.

[6] See Rules on what constitutes a "multi-unit" powerplant.

Chart #4
LSE New or Renewal Power Purchase Contract



Please see footnotes on next page

Chart #4
LSE New or Renewal Power
Purchase Contract

Footnotes

[1]"Specified" means that the contract identifies the individual powerplant(s) that will be delivering power, and each must pass the EPS screening process. However, the long-term contract (i.e., with a term of five years or longer) could also comply with the interim EPS under the following circumstances (not illustrated here):

(1) If the contract specifies that power will be delivered exclusively from pre-approved renewable technologies or resources, or , and there are assurances in the contract to that effect, or

(2) If a group of powerplants from which power will be delivered under a contract is specified, and there are assurances in the contract that deliveries will only be from one or more of the powerplants in that group *and* each of those that are baseload powerplants would individually pass the EPS.

[2]LSE may request case-by-case commission review/approval of reliability exemptions.

[3] Is the contract with a generating facility designed and intended to provide electricity at an annualized capacity factor of 60% or greater?

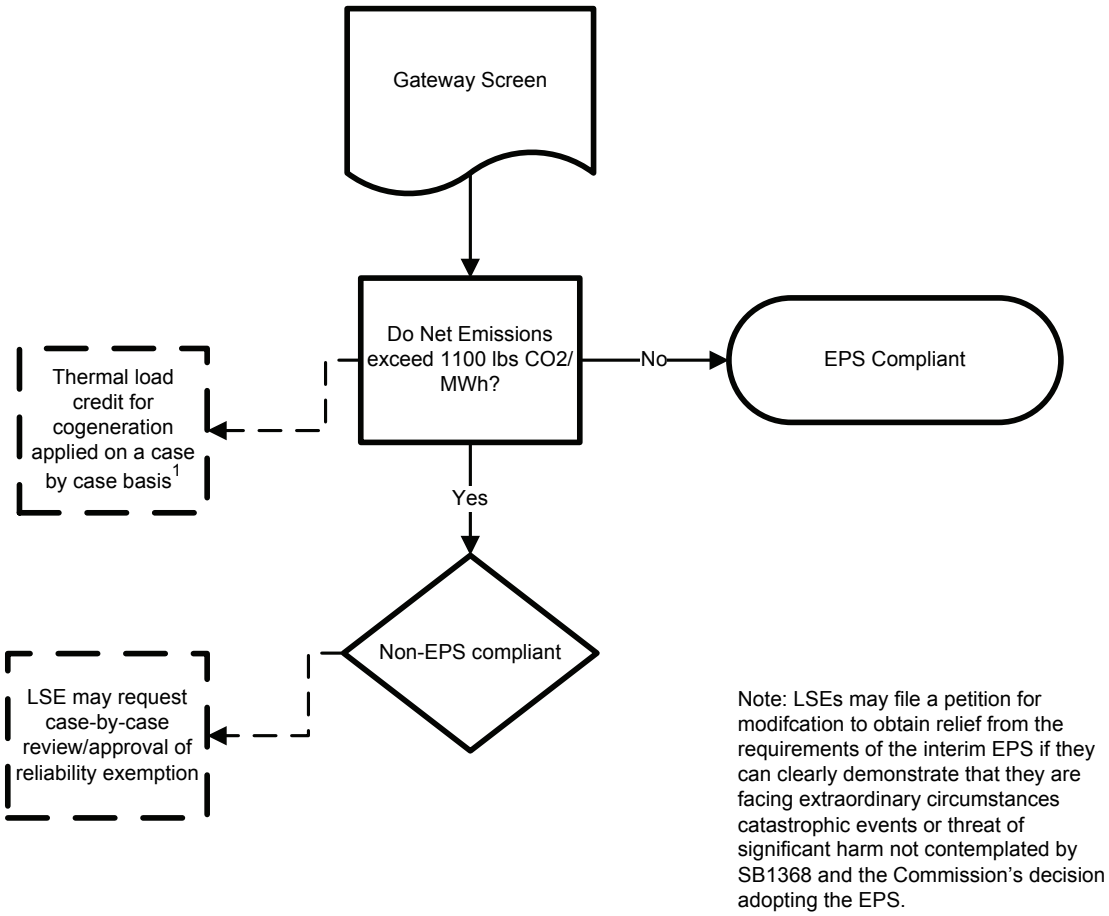
[4] See Rules on what constitutes a "multi-unit" powerplant.

[5]Pre-approved technologies include: Solar thermal electric (with up to 25% gas heat assist); wind; geothermal (with or without reinjection); generating facilities using biomass (e.g. agricultural and wood waste, landfill gas) that would otherwise be disposed of utilizing open burning, forest accumulation, landfill (uncontrolled, gas collection with flare or engine), spreading or composting

[6] The rated capacity of CCGTs for the purpose of establishing when the 50MW addition is reached will be: 1) for all CCGT plants that are in operation on the effective date of this decision – the rated capacity of the plant that is operating, or 2) for all other CCGT plans (or additions to plants) that obtain a CEC final permit to operate as of June 30, 2007 – the rated capacity authorized by the permit.

[7]Only the units that have been added must comply with the EPS.

EPS Gateway Screen



[1] Credit will be calculated using Commission-adopted methodology.

(END OF ATTACHMENT 2)

ATTACHMENT 3

TEXT OF SB 1368

Senate Bill No. 1368

CHAPTER 598

An act to add Chapter 3 (commencing with Section 8340) to Division 4.1 of the Public Utilities Code, relating to electricity.

[Approved by Governor September 29, 2006. Filed with Secretary of State September 29, 2006.]

LEGISLATIVE COUNSEL'S DIGEST

SB 1368, Perata. Electricity: emissions of greenhouse gases.

(1) Under existing law, the Public Utilities Commission (PUC) has regulatory authority over public utilities, including electrical corporations. Existing law authorizes the PUC to establish rules for all public utilities, and the Legislature has established procedures for rulemaking proceedings before the PUC. Existing law requires the PUC to review and adopt a procurement plan and a renewable energy procurement plan for each electrical corporation pursuant to the California Renewables Portfolio Standard Program.

Existing law requires the State Energy Resources Conservation and Development Commission (Energy Commission) to certify eligible renewable energy resources, to design and implement an accounting system to verify compliance with the renewables portfolio standard by retail sellers, and to allocate and award supplemental energy payments to cover the above-market costs of electricity generated by eligible renewable energy resources.

Under existing law the governing board of a local publicly owned electric utility is responsible for implementing and enforcing a renewables portfolio standard that recognizes the intent of the Legislature to encourage renewable resources, while taking into consideration the effect of the standard on rates, reliability, and financial resources and the goal of environmental improvement. Existing law requires the governing board of a local publicly owned electric utility to report certain information relative to renewable energy resources to its customers.

Existing law defines an "electric service provider" as an entity that offers electrical service to customers within the service territory of an electrical corporation, excluding electrical corporations, local publicly owned electric utilities, and certain cogenerators. Provisions of the existing Public Utilities Act restructuring the electrical services industry require that electric service providers register with the PUC and require the PUC to authorize and facilitate direct transactions between electric service providers and retail end-use customers. However, other existing law suspends the right of retail end-use customers other than community aggregators, to acquire service through a direct transaction, until the

Department of Water Resources no longer supplies electricity under that law.

Existing law defines a "community choice aggregator" and authorizes customers to aggregate their electric loads as members of their local community with community choice aggregators.

The existing restructuring of the electrical industry within the Public Utilities Act provides for the establishment of an Independent System Operator (ISO) as a nonprofit public benefit corporation. Existing law requires the ISO to ensure efficient use and reliable operation of the transmission grid consistent with achieving planning and operating reserve criteria no less stringent than those established by the Western Electricity Coordinating Council and the American Electric Reliability Council.

Under existing law, the State Air Resources Board, the Energy Commission, and the California Climate Action Registry all have responsibilities with respect to the control of emissions of greenhouse gases, as defined, and the Secretary for Environmental Protection is required to coordinate emission reductions of greenhouse gases and climate change activity in state government.

This bill would prohibit any load-serving entity, as defined, and any local publicly owned electric utility, from entering into a long-term financial commitment, as defined, unless any baseload generation, as defined, complies with a greenhouse gases emission performance standard. The bill would require the PUC, by February 1, 2007, through a rulemaking proceeding and in consultation with the Energy Commission and the State Air Resources Board, to establish a greenhouse gases emission performance standard for all baseload generation of load-serving entities. The bill would require the Energy Commission, by June 30, 2007, at a duly noticed public hearing and in consultation with the PUC and the State Air Resources Board, to establish a greenhouse gases emission performance standard for all baseload generation of local publicly owned electric utilities. The bill would require that the greenhouse gases emission performance standard not exceed the rate of emissions of greenhouse gases for combined-cycle natural gas, as defined, baseload generation. The bill would prohibit the PUC from approving any long-term financial commitment by an electrical corporation unless any baseload generation supplied under the long-term commitment complies with the greenhouse gases emission performance standard. The bill would authorize the PUC to review any long-term financial commitment proposed to be entered into by an electric service provider or community choice aggregator in order to enforce the bill's requirements. The bill would require the PUC to adopt rules to enforce these requirements for load-serving entities and would require the PUC to adopt procedures, for all load-serving entities, to verify the emissions of greenhouse gases from any baseload generation supplied under a contract subject to the greenhouse gases emission performance standard. The bill would require the PUC, through a rulemaking proceeding and in consultation with the Energy Commission and the State Air Resources Control Board, to reevaluate and continue, modify, or

replace the greenhouse gases emissions performance standard when an enforceable greenhouse gases emissions limit is established and in operation, that is applicable to load-serving entities.

The bill would require the Energy Commission to adopt regulations for the enforcement of the greenhouse gases emission performance standard with respect to a local publicly owned electric utility. The bill would require the Energy Commission, in a duly noticed public hearing and in consultation with the PUC and the State Air Resources Board, to reevaluate and continue, modify, or replace the greenhouse gases emission performance standard when an enforceable greenhouse gases emissions limit is established and in operation, that is applicable to local publicly owned electric utilities.

(2) Under existing law, a violation of the Public Utilities Act or an order or direction of the commission is a crime.

Because certain of the provisions of this bill are within the act and require action by the commission to implement its requirements, a violation of these provisions would impose a state-mandated local program by creating a new crime.

(3) The California Constitution requires the state to reimburse local agencies and school districts for certain costs mandated by the state. Statutory provisions establish procedures for making that reimbursement.

This bill would provide that no reimbursement is required by this act for a specified reason.

The people of the State of California do enact as follows:

SECTION 1. The Legislature finds and declares all of the following:

(a) Global warming will have serious adverse consequences on the economy, health, and environment of California.

(b) The Governor, in Executive Order S-3-05, has called for the reduction of California's emission of greenhouse gases to 1990 levels by 2020.

(c) Over the past three decades, the state has taken significant strides towards implementing an environmentally and economically sound energy policy through reliance on energy efficiency, conservation, and renewable energy resources in order to promote a sustainable energy future that ensures an adequate and reliable energy supply at reasonable and stable prices.

(d) To the extent energy efficiency and renewable resources are unable to satisfy increasing energy and capacity needs, the Energy Action Plan II establishes a policy that the state will rely on clean and efficient fossil fuel fired generation and will "encourage the development of cost-effective, highly-efficient, and environmentally-sound supply resources to provide reliability and consistency with the state's energy priorities."

(e) California's investor-owned electric utilities currently have long-term procurement plans that include proposals for making new

long-term financial commitments to electrical generating resources over the next decade, which will generate electricity while producing emissions of greenhouse gases for the next 30 years or longer. New long-term financial commitments to zero- or low-carbon generating resources should be encouraged.

(f) The Public Utilities Commission (PUC) and State Energy Resources Conservation and Development Commission (Energy Commission) both have concluded, and the Legislature finds, that federal regulation of emissions of greenhouse gases is likely during this decisionmaking timeframe.

(g) It is vital to ensure all electricity load-serving entities internalize the significant and underrecognized cost of emissions recognized by the PUC with respect to the investor-owned electric utilities, and to reduce California's exposure to costs associated with future federal regulation of these emissions.

(h) The establishment of a policy to reduce emissions of greenhouse gases, including an emissions performance standard for all procurement of electricity by load-serving entities, is a logical and necessary step to meet the goals of the Energy Action Plan II and the Governor's goals for reduction of emissions of greenhouse gases.

(i) A greenhouse gases emission performance standard for new long-term financial commitments to electrical generating resources will reduce potential financial risk to California consumers for future pollution-control costs.

(j) A greenhouse gases emission performance standard for new long-term financial commitments to electric generating resources will reduce potential exposure of California consumers to future reliability problems in electricity supplies.

(k) In order to have any meaningful impact on climate change, the Governor's goals for reducing emissions of greenhouse gases must be applied to the state's electricity consumption, not just the state's electricity production.

(*l*) The 2005 Integrated Energy Policy Report adopted by the Energy Commission recommends that any greenhouse gases emission performance standard for utility procurement of baseload generation be set no lower than levels achieved by a new combined-cycle natural gas turbine.

(m) As the largest electricity consumer in the region, California has an obligation to provide clear guidance on performance standards for procurement of electricity by load-serving entities.

SEC. 2. Chapter 3 (commencing with Section 8340) is added to Division 4.1 of the Public Utilities Code, to read:

Chapter 3. Greenhouse Gases Emission Performance Standard for Baseload Electrical Generating Resources

8340. For purposes of this chapter, the following terms have the following meanings:

(a) "Baseload generation" means electricity generation from a powerplant that is designed and intended to provide electricity at an annualized plant capacity factor of at least 60 percent.

(b) "Combined-cycle natural gas" with respect to a powerplant means the powerplant employs a combination of one or more gas turbines and steam turbines in which electricity is produced in the steam turbine from otherwise lost waste heat exiting from one or more of the gas turbines.

(c) "Community choice aggregator" means a "community choice aggregator" as defined in Section 331.1.

(d) "Electrical corporation" means an "electrical corporation" as defined in Section 218.

(e) "Electric service provider" means an "electric service provider" as defined in Section 218.3, but does not include corporations or persons employing cogeneration technology or producing electricity from other than a conventional power source consistent with subdivision (b) of Section 218.

(f) "Energy Commission" means the State Energy Resources Conservation and Development Commission.

(g) "Greenhouse gases" means those gases listed in subdivision (h) of Section 42801.1 of the Health and Safety Code.

(h) "Load-serving entity" means every electrical corporation, electric service provider, or community choice aggregator serving end-use customers in the state.

(i) "Local publicly owned electric utility" means a "local publicly owned electric utility" as defined in Section 9604.

(j) "Long-term financial commitment" means either a new ownership investment in baseload generation or a new or renewed contract with a term of five or more years, which includes procurement of baseload generation.

(k) "Output-based methodology" means a greenhouse gases emission performance standard that is expressed in pounds of greenhouse gases emitted per megawatthour and factoring in the useful thermal energy employed for purposes other than the generation of electricity.

(*l*) "Plant capacity factor" means the ratio of the electricity produced during a given time period, measured in kilowatthours, to the electricity the unit could have produced if it had been operated at its rated capacity during that period, expressed in kilowatthours.

(m) "Powerplant" means a facility for the generation of electricity, and includes one or more generating units at the same location.

(n) "Zero- or low-carbon generating resource" means an electrical generating resource that will generate electricity while producing

emissions of greenhouse gases at a rate substantially below the greenhouse gas emission performance standard, as determined by the commission.

8341. (a) No load-serving entity or local publicly owned electric utility may enter into a long-term financial commitment unless any baseload generation supplied under the long-term financial commitment complies with the greenhouse gases emission performance standard established by the commission, pursuant to subdivision (d), for a load-serving entity, or by the Energy Commission, pursuant to subdivision (e), for a local publicly owned electric utility.

(b) (1) The commission shall not approve a long-term financial commitment by an electrical corporation unless any baseload generation supplied under the long-term financial commitment complies with the greenhouse gases emission performance standard established by the commission pursuant to subdivision (d).

(2) The commission may, in order to enforce the requirements of this section, review any long-term financial commitment proposed to be entered into by an electric service provider or a community choice aggregator.

(3) The commission shall adopt rules to enforce the requirements of this section, for load-serving entities. The commission shall adopt procedures, for all load-serving entities, to verify the emissions of greenhouse gases from any baseload generation supplied under a contract subject to the greenhouse gases emission performance standard to ensure compliance with the standard.

(4) In determining whether a long-term financial commitment is for baseload generation, the commission shall consider the design of the powerplant and the intended use of the powerplant, as determined by the commission based upon the electricity purchase contract, any certification received from the Energy Commission, any other permit or certificate necessary for the operation of the powerplant, including a certificate of public convenience and necessity, any procurement approval decision for the load-serving entity, and any other matter the commission determines is relevant under the circumstances.

(5) Costs incurred by an electrical corporation to comply with this section, including those costs incurred for electricity purchase agreements that are approved by the commission that comply with the greenhouse gases emission performance standard, are to be treated as procurement costs incurred pursuant to an approved procurement plan and the commission shall ensure timely cost recovery of those costs pursuant to paragraph (3) of subdivision (d) of Section 454.5.

(6) A long-term financial commitment entered into through a contract approved by the commission, for electricity generated by a zero- or low-carbon generating resource that is contracted for, on behalf of consumers of this state on a cost-of-service basis, shall be recoverable in rates, in a manner determined by the commission consistent with Section 380. The commission may, after a hearing, approve an increase from one-half to 1 percent in the return on investment by the third party entering

into the contract with an electrical corporation with respect to investment in zero- or low-carbon generation resources authorized pursuant to this subdivision.

(c) (1) The Energy Commission shall adopt regulations for the enforcement of this chapter with respect to a local publicly owned electric utility.

(2) The Energy Commission may, in order to ensure compliance with the greenhouse gases emission performance standard by local publicly owned electric utilities, apply the procedures adopted by the commission to verify the emissions of greenhouse gases from baseload generation pursuant to subdivision (b).

(3) In determining whether a long-term financial commitment is for baseload generation, the Energy Commission shall consider the design of the powerplant and the intended use of the powerplant, as determined by the Energy Commission based upon the electricity purchase contract, any certification received from the Energy Commission, any other permit for the operation of the powerplant, any procurement approval decision for the load-serving entity, and any other matter the Energy Commission determines is relevant under the circumstances.

(d) (1) On or before February 1, 2007, the commission, through a rulemaking proceeding, and in consultation with the Energy Commission and the State Air Resources Board, shall establish a greenhouse gases emission performance standard for all baseload generation of load-serving entities, at a rate of emissions of greenhouse gases that is no higher than the rate of emissions of greenhouse gases for combined-cycle natural gas baseload generation. Enforcement of the greenhouse gases emission performance standard shall begin immediately upon the establishment of the standard. All combined-cycle natural gas powerplants that are in operation, or that have an Energy Commission final permit decision to operate as of June 30, 2007, shall be deemed to be in compliance with the greenhouse gases emission performance standard.

(2) In determining the rate of emissions of greenhouse gases for baseload generation, the commission shall include the net emissions resulting from the production of electricity by the baseload generation.

(3) The commission shall establish an output-based methodology to ensure that the calculation of emissions of greenhouse gases for cogeneration recognizes the total usable energy output of the process, and includes all greenhouse gases emitted by the facility in the production of both electrical and thermal energy.

(4) In calculating the emissions of greenhouse gases by facilities generating electricity from biomass, biogas, or landfill gas energy, the commission shall consider net emissions from the process of growing, processing, and generating the electricity from the fuel source.

(5) Carbon dioxide that is injected in geological formations, so as to prevent releases into the atmosphere, in compliance with applicable laws and regulations shall not be counted as emissions of the powerplant in

determining compliance with the greenhouse gases emissions performance standard.

(6) In adopting and implementing the greenhouse gases emission performance standard, the commission, in consultation with the Independent System Operator shall consider the effects of the standard on system reliability and overall costs to electricity customers.

(7) In developing and implementing the greenhouse gases emission performance standard, the commission shall address long-term purchases of electricity from unspecified sources in a manner consistent with this chapter.

(8) In developing and implementing the greenhouse gases emission performance standard, the commission shall consider and act in a manner consistent with any rules adopted pursuant to Section 824a-3 of Title 16 of the United States Code.

(9) An electrical corporation that provides electric service to 75,000 or fewer retail end-use customers in California may file with the commission a proposal for alternative compliance with this section, which the commission may accept upon a showing by the electrical corporation of both of the following:

(A) A majority of the electrical corporation's retail end-use customers for electric service are located outside of California.

(B) The emissions of greenhouse gases to generate electricity for the retail end-use customers of the electrical corporation are subject to a review by the utility regulatory commission of at least one other state in which the electrical corporation provides regulated retail electric service.

(e) (1) On or before June 30, 2007, the Energy Commission, at a duly noticed public hearing and in consultation with the commission and the State Air Resources Board, shall establish a greenhouse gases emission performance standard for all baseload generation of local publicly owned electric utilities at a rate of emissions of greenhouse gases that is no higher than the rate of emissions of greenhouse gases for combined-cycle natural gas baseload generation. The greenhouse gases emission performance standard established by the Energy Commission for local publicly owned electric utilities shall be consistent with the standard adopted by the commission for load-serving entities. Enforcement of the greenhouse gases emission performance standard shall begin immediately upon the establishment of the standard. All combined-cycle natural gas powerplants that are in operation, or that have an Energy Commission final permit decision to operate as of June 30, 2007, shall be deemed to be in compliance with the greenhouse gases emission performance standard.

(2) The greenhouse gases emission performance standard shall be adopted by regulation pursuant to the Administrative Procedure Act (Chapter 3.5 (commencing with Section 11340) of Part 1 of Division 3 of Title 2 of the Government Code).

(3) In determining the rate of emissions of greenhouse gases for baseload generation, the Energy Commission shall include the net

emissions resulting from the production of electricity by the baseload generation.

(4) The Energy Commission shall establish an output-based methodology to ensure that the calculation of emissions of greenhouse gases for cogeneration recognizes the total usable energy output of the process, and includes all greenhouse gas emitted by the facility in the production of both electrical and thermal energy.

(5) In calculating the emissions of greenhouse gases by facilities generating electricity from biomass, biogas, or landfill gas energy, the Energy Commission shall consider net emissions from the process of growing, processing, and generating the electricity from the fuel source.

(6) Carbon dioxide that is captured from the emissions of a powerplant and that is permanently disposed of in geological formations in compliance with applicable laws and regulations, shall not be counted as emissions from the powerplant.

(7) In adopting and implementing the greenhouse gases emission performance standard, the Energy Commission, in consultation with the Independent System Operator, shall consider the effects of the standard on system reliability and overall costs to electricity customers.

(8) In developing and implementing the greenhouse gases emission performance standard, the Energy Commission shall address long-term purchases of electricity from unspecified sources in a manner consistent with this chapter.

(9) In developing and implementing the greenhouse gases emission performance standard, the Energy Commission shall consider and act in a manner consistent with any rules adopted pursuant to Section 824a-3 of Title 16 of the United States Code.

(f) The Energy Commission, in a duly noticed public hearing and in consultation with the commission and the State Air Resources Board, shall reevaluate and continue, modify, or replace the greenhouse gases emission performance standard when an enforceable greenhouse gases emissions limit is established and in operation, that is applicable to local publicly owned electric utilities.

(g) The commission, through a rulemaking proceeding and in consultation with the Energy Commission and the State Air Resources Board, shall reevaluate and continue, modify, or replace the greenhouse gases emission performance standard when an enforceable greenhouse gases emissions limit is established and in operation, that is applicable to load-serving entities.

SEC. 3. No reimbursement is required by this act pursuant to Section 6 of Article XIII B of the California Constitution because the only costs that may be incurred by a local agency or school district will be incurred because this act creates a new crime or infraction, eliminates a crime or infraction, or changes the penalty for a crime or infraction, within the meaning of Section 17556 of the Government Code, or changes the

definition of a crime within the meaning of Section 6 of Article XIII B of the California Constitution.

O

(END OF ATTACHMENT 3)

ATTACHMENT 4
LIST OF PARTIES' FILINGS IN PHASE 1

Attachment 4

List of Parties' Filings in Phase 1[1]

	Pre-Hearing Comments 5/4/06	Pre-Workshop Comments 6/12/06	Brief -- Jurisdictional Issues 6/30/06	Reply to Brief on Jurisdictional Issues 7/11/06	Post Workshop Comments 7/27/2006	Draft Workshop Report Comments 9/8/06	Draft Workshop Report Reply Comments 9/15/06	Opening Comments/ Briefs 10/18/06	Reply Comments/ Briefs 10/27/06	Reply Comments to CEED Docs 11/1/06
Anza Electric Cooperative								X		
Alliance for Retail Energy Markets	X	X		X	X	X		X	X	
California Cogneration Council					X	X		X	X	
California Municipal Utilities Association								X		X
Calpine Corporation		X			X	X	X	X	X	
Carson Hydrogen Power Project								X		
Center for Energy and Economic Development	X		X	X		X		X	X	
Center for Resource Solutions		X			X					
Cogeneration Association of California	X	X		X	X	X	X	X	X	
Community Environmental Council										X
Constellation Companies		X			X	X	X	X	X	

1 Some of the parties submjitted comments jointly with others.

Attachment 4

List of Parties' Filings in Phase 1[1]

	Pre-Hearing Comments 5/4/06	Pre-Workshop Comments 6/12/06	Brief -- Jurisdictional Issues 6/30/06	Reply to Brief on Jurisdictional Issues 7/11/06	Post Workshop Comments 7/27/2006	Draft Workshop Report Comments 9/8/06	Draft Workshop Report Reply Comments 9/15/06	Opening Comments/ Briefs 10/18/06	Reply Comments/ Briefs 10/27/06	Reply Comments to CEED Docs 11/1/06
Division of Rateapyer Advocates	X	X	X	X	X	X	X	X	X	X
Energy Producers and Users Coalition	X	X		X	X	X	X	X	X	
Green Power Institute	X	X		X	X	X	X	X	X	
Independent Energy Producers Association		X	X			X		X	X	
International Emissions Trading Association		X								
LS Power Generation		X			X		X	X	X	
Mirant Companies					X			X	X	
Northern California Power Agency								X		
Natural Resources Defense Council	X	X	X	X	X	X	X	X	X	X
NRG Energy								X	X	
Pacific Gas & Electric Company	X	X	X	X	X	X	X	X	X	

1 Some of the parties submjitted comments jointly with others.

Attachment 4

List of Parties' Filings in Phase 1[1]

	Pre-Hearing Comments 5/4/06	Pre-Workshop Comments 6/12/06	Brief -- Jurisdictional Issues 6/30/06	Reply to Brief on Jurisdictional Issues 7/11/06	Post Workshop Comments 7/27/2006	Draft Workshop Report Comments 9/8/06	Draft Workshop Report Reply Comments 9/15/06	Opening Comments/ Briefs 10/18/06	Reply Comments/ Briefs 10/27/06	Reply Comments to CEED Docs 11/1/06
PacificCorp					X	X		X	X	
Plumas-Sierra Rural Electric Cooperative								X		
PowerEx					X					
Redefining Progress		X								
Sacramento Municipal Utility District								X	X	
San Francisco Community Power	X				X	X	X	X		
San Diego Gas and Electric Company (with SoCalGas)	X	X	X	X	X	X	X	X	X	
Sempra Global	X	X				X	X			
Sierra Pacific Power Company								X	X	
Southern California Edison Company	X	X	X		X	X	X	X	X	
Southern California Gas Company (with SDG&E)	X	X	X	X	X	X	X	X	X	

1 Some of the parties submjitted comments jointly with others.

Attachment 4

List of Parties' Filings in Phase 1[1]

	Pre-Hearing Comments 5/4/06	Pre-Workshop Comments 6/12/06	Brief -- Jurisdictional Issues 6/30/06	Reply to Brief on Jurisdictional Issues 7/11/06	Post Workshop Comments 7/27/2006	Draft Workshop Report Comments 9/8/06	Draft Workshop Report Reply Comments 9/15/06	Opening Comments/ Briefs 10/18/06	Reply Comments/ Briefs 10/27/06	Reply Comments to CEED Docs 11/1/06
Southern California Public Power Authority								X		
State of California Attorney General		X		X				X		X
Surprise Valley Electrificiation Corporation								X		
The Utility Reform Network	X				X	X	X	X	X	
Union of Concerned Scientists					X	X	X	X	X	
Western Resource Advocates				X	X	X	X	X	X	

1 Some of the parties submjitted comments jointly with others.

ATTACHMENT 5

SAMPLE OF CALCULATIONS OF COGENERATION EMISSIONS (COGENERATION CREDIT)

ATTACHMENT 5: SAMPLE CALCULATIONS OF COGENERATION EMISSIONS (COGENERATION CREDIT)

Table A -- Typical Cogen

Cogeneration Fuel and Emission Savings vs. New CCGT Plants

	Fuel In	Power Out	Steam Out	CO2	FERC Efficiency	Total Efficiency	GHG Emission Performance Standards: CAC/EPUC	Avoided Emissions	Heat Rate of Generator
	MMBtu	*MWh*	*MMBtu*	*tons*	*%*	*%*	*lbs/MWh*	*lbs/MWh*	*lbs/MWh*
Cogenerator	100	7.8	48	5.9	51%	74%			
Heat rate (Btu/kWh)		*12,750*							
CO_2 Emissions									
Without Cogen Credit							**1,492**	**1,492**	**1,492**
Amount of Cogen Credit							**955**	**888**	**481**
Effective Emission Rate							**537**	**604**	**1,011**
Complies with EPS?							**Yes**	**Yes**	**No**
New CCGT	67	7.8		3.9			**1,000**	**1,000**	**1,000**
Heat rate (Btu/kWh)		*8,547*							
Steam Boiler	60		47.6	3.5			64%	60%	32%
Boiler efficiency (%)			*80%*					5%	32%
Total Fuel Use	127					59%			
Total Emissions				7.4					
Cogen Savings:									
Fuel	**21%**								
CO_2 Emissions	**21%**								

All CO_2 emissions are based on *0.0585* *tons of CO_2 per MMBtu*

Formulas for GHG Emission Performance Standards

CAC/EPUC =	**CO2 ÷ (Power Out + [Cogen Steam Out / 3.413])**
Avoided Emissions =	**(Cogen CO2 - Boiler CO2) ÷ (Cogen Power Out)**
Heat Rate of Generator =	**CO2 / (Power Out + [Cogen Steam Out ÷ Cogen Heat Rate])**

Table B -- High Electric Output, Low Steam Output

Cogeneration Fuel and Emission Savings vs. New CCGT Plants

	Fuel In	Power Out	Steam Out	CO2	FERC Efficiency	Total Efficiency	GHG Emission Performance Standards: CAC/EPUC	Avoided Emissions	Heat Rate of Generator
	MMBtu	*MWh*	*MMBtu*	*tons*	*%*	*%*	*lbs/MWh*	*lbs/MWh*	*lbs/MWh*
Cogenerator	100	10.3	19	5.9	45%	54%			
Heat rate (Btu/kWh)		*9,750*							
CO_2 Emissions									
Without Cogen Credit							**1,141**	**1,141**	**1,141**
Amount of Cogen Credit							**405**	**275**	**185**
Effective Emission Rate							**735**	**866**	**956**
Complies with EPS?							**Yes**	**Yes**	**Yes**
New CCGT	88	10.3		5.1			**1,000**	**1,000**	**1,000**
Heat rate (Btu/kWh)		*8,547*							
Steam Boiler	24		19.3	1.4			36%	24%	16%
Boiler efficiency (%)			*80%*					11%	19%
Total Fuel Use	112					49%			
Total Emissions				6.5					
Cogen Savings:									
Fuel	**11%**								
CO_2 Emissions	**11%**								

All CO_2 emissions are based on 0.0585 tons of CO_2 per MMBtu

Formulas for GHG Emission Performance Standards

CAC/EPUC = CO2 ÷ (Power Out + [Cogen Steam Out / 3.413])

Avoided Emissions = (Cogen CO2 - Boiler CO2) ÷ (Cogen Power Out)

Heat Rate of Generator = CO2 / (Power Out + [Cogen Steam Out ÷ Cogen Heat Rate])

Table C -- High Efficiency EOR or Refinery Cogen

Cogeneration Fuel and Emission Savings vs. New CCGT Plants

	Fuel In	Power Out	Steam Out	CO2	FERC Efficiency	Total Efficiency	GHG Emission Performance Standards: CAC/EPUC	Avoided Emissions	Heat Rate of Generator
	MMBtu	*MWh*	*MMBtu*	*tons*	*%*	*%*	*lbs/MWh*	*lbs/MWh*	*lbs/MWh*
Cogenerator	100	7.8	73	5.9	63%	100%			
Heat rate (Btu/kWh)		*12,750*							
CO_2 Emissions									
Without Cogen Credit							**1,492**	**1,492**	**1,492**
Amount of Cogen Credit							**1,092**	**1,361**	**629**
Effective Emission Rate							**400**	**131**	**862**
Complies with EPS?							**Yes**	**Yes**	**Yes**
New CCGT	67	7.8		3.9			**1,000**	**1,000**	**1,000**
Heat rate (Btu/kWh)		*8,547*							
Steam Boiler	91		73.0	5.3			73%	91%	42%
Boiler efficiency (%)			*80%*					-18%	31%
Total Fuel Use	158					63%			
Total Emissions				9.3					
Cogen Savings:									
Fuel	**37%**								
CO_2 Emissions	**37%**								

All CO_2 emissions are based on *0.0585* *tons of CO_2 per MMBtu*

Formulas for GHG Emission Performance Standards

CAC/EPUC = CO2 ÷ (Power Out + [Cogen Steam Out / 3.413])

Avoided Emissions = (Cogen CO2 - Boiler CO2) ÷ (Cogen Power Out)

Heat Rate of Generator = CO2 / (Power Out + [Cogen Steam Out ÷ Cogen Heat Rate])

Table D
Calculation of Thermal Energy Values
Used in the Cogen Sample Calculation Tables

		Table A	Table B	Table C
1	**Fuel In (MMBtu)**	100	100	100
2				
3	**ELECTRIC GENERATION**			
4	Electric Generation Efficiency **(%)**	27%	35%	27%
5	Heat Rate for Electric Generation **(Btu/kWh)**, which is 3.413 MMBtu/kWh ÷ 35% x 1,000 kWh/MWh	12,750	9,750	12,750
6	Electricity Out in **MWh** (Heat Rate) x (Fuel In)	7.84	10.26	7.84
7				
8	**THERMAL ENERGY**			
9	Maximum Remaining Energy available after the electric generation process in **MMBtu** (Fuel In) - (MWh) x (3.413 MMBtu/MWh)	73	65	73
10	**Percentage of Usable Waste Energy** The Registry method in Step 3 directs the reader to look up this value in the IAPWS Steam Tables if known, but states that "default values of 80% for steam" can also be used. However, the use of the 80% in this cell may not be thermodynamically accurate.	66%	30%	72%
11	Usable Thermal Energy Output available from the electric generation process **(MMBtu)**	**48**	**19**	**53**
12				
13	**ACTUAL OR AVOIDED BOILER**			
14	Boiler Efficiency (%)	80%	80%	80%
15	Proxy fuel that would have been burned in a boiler to make the same amount of usable energy shown above. **(MMBtu)**	60	24	66
16	Usable Thermal Energy Output from the Avoided Boiler **(MMBtu)**	**48**	**19**	**53**

ATTACHMENT 6

SUMMARY OF NET EMISSIONS DATA FOR RENEWABLES

Attachment 6: Summary of Net Emissions Data For Renewables

Table 1: GHG Emissions From The Operation Of Energy Facilities (1989 Study)

Technology	CO_2 tons/mil KWh	CH_4 lbs/mil KWh	N_2O lbs/mil KWh
Conventional Gas	610	10	100
Conventional Oil	890	17	340
Conventional Coal	1,230	17	340
Coal Gasification IGCC	1,090	17	410
Combined Cycle Gas	480	190	170
Agricultural-Waste Biomass	550	-160,000	ND
Landfill-Gas Generation	580	-440,000	ND
Geothermal without Reinjection	10	1	0
Geothermal with Reinjection	1	1	0
Solar Thermal with Gas Assist	190	3	34
Wind Electricity	0	0	0

Technology	CO_2 lbs/MWh	$CO_2 + CH_4$* lbs/MWh
Conventional Gas	1,220	1,221
Conventional Oil	1,780	1,781
Conventional Coal	2,460	2,461
Coal Gasification IGCC	2,180	2,181
Combined Cycle Gas	960	970
Agricultural-Waste Biomass	1,100	-7,700
Landfill-Gas Generation	1,160	-23,040
Geothermal without Reinjection	20	20
Geothermal with Reinjection	2	2
Solar Thermal with Gas Assist	380	380
Wind Electricity	0	0

* Expressed in terms of CO_2 equivalents

Source: Greenhouse-Gas Emissions From The Operation of Energy Facilities
Gleick, Morris and Norman, July 22, 1989, Table 3

Table 2: Greenhouse Gas Emissions Factors For Biomass (2000 Study)

Technology	$CO_2 + CH_4$[1] tons/bdt	lbs/MWh	% Fuel Mix	1999	net:		net:
Biomass Energy	1.76	3,520		3,802	(1,774)		
Open Burning	2.06	4,120	39%	1,480	1,604		
Forest Accumulation	3.35	6,700	7%	267	471		
Landfills							
Uncontrolled	4.24	8,480	19%	704	1,570	39%	(2,553)
Flare	2.37	4,740	15%	557	694	31%	
Engine	2.18	4,360	15%	557	638	31%	
Spreading	2.27	4,540	2%	60	72		
Composting	2.61	5,220	5%	179	246		
Avoided Fossil	0.52	1,040					
Net Biomass[2]		(1,774)					
Avoided Fossil[3]		(1,040)					

Source: Biomass Energy Production in California: The Case for a Biomass Policy Initiative , November 2000 (Morris), NREL/SR-570-28805, Table 6

[1] Expressed in terms of CO_2 equivalents

[2] Based on California Biomass Fuel Mix, emissions at power plant less emissions of alternative disposal of biomass

[3] Based on California Fossil Fuel Mix, same for all renewables, not included in Net Biomass.

Table 3: Emission Rates (1989 Study Updated With 2000 Biomass Study)

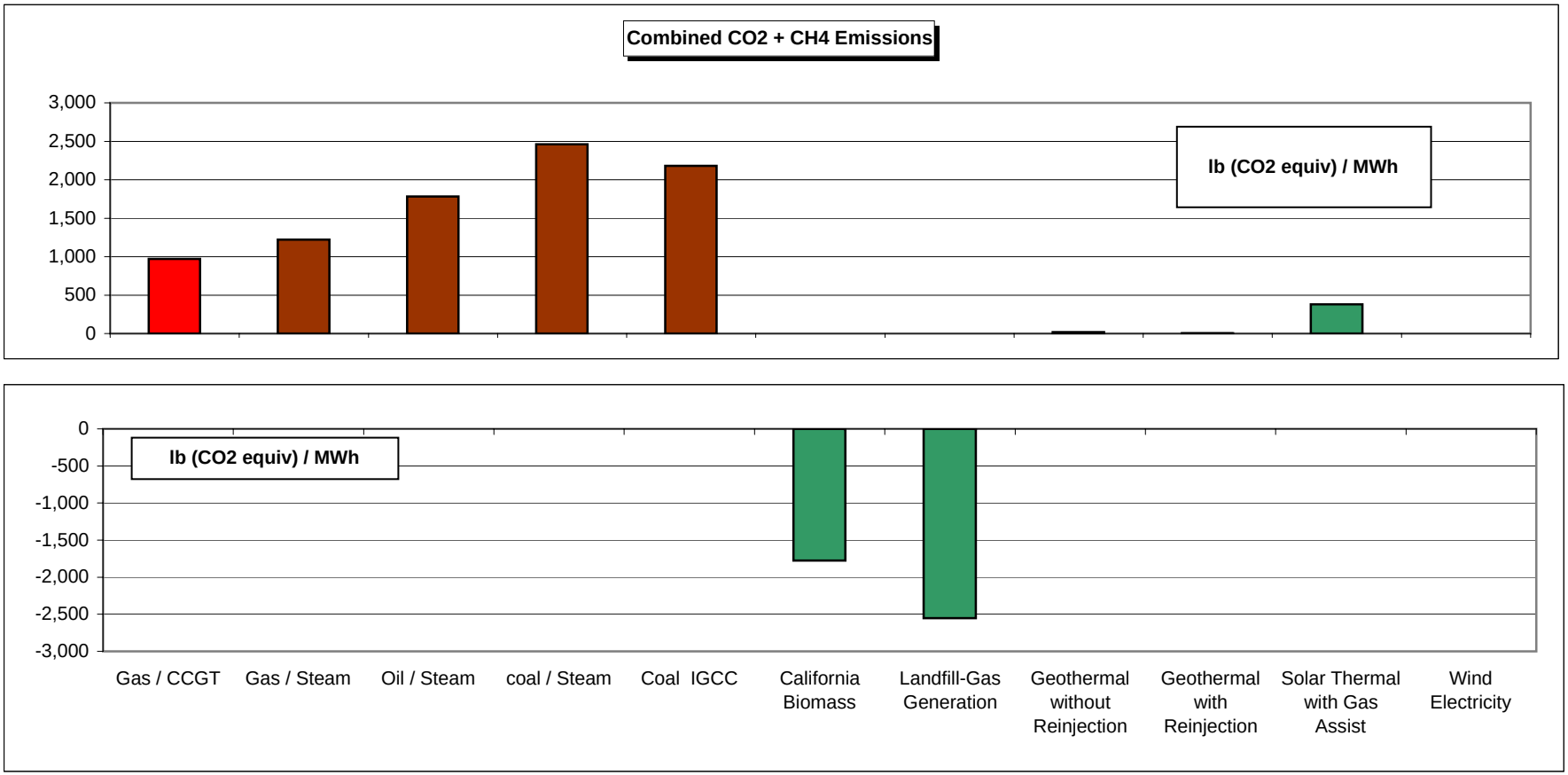
Technology	CO2 tons/mil KWh	CH4 lbs/mil KWh	N2O lbs/mil KWh	
Gas / CCGT	480	190	170	
Gas / Steam	610	10	100	
Oil / Steam	890	17	340	
coal / Steam	1,230	17	340	
Coal IGCC	1,090	17	410	
California Biomass	550	-160,000	ND	data not used in graph
Landfill-Gas Generation	580	-440,000	ND	data not used in graph
Geothermal without Reinjection	10	1	0	
Geothermal with Reinjection	1	1	0	
Solar Thermal with Gas Assist	190	3	34	
Wind Electricity	0	0	0	

Technology	CO2 lbs/MWh	CO2 + CH4* lbs/MWh	CO2 + CH4* lbs/MWh	
Gas / CCGT	960	**970**	0	
Gas / Steam	1,220	**1,221**	0	
Oil / Steam	1,780	**1,781**	0	
coal / Steam	2,460	**2,461**	0	
Coal IGCC	2,180	**2,181**	0	
California Biomass	1,100	0	0	
Landfill-Gas Generation	1,160	0	**-1,774**	**
Geothermal without Reinjection	20	20	**-2,553**	**
Geothermal with Reinjection	2	**2**	0	
Solar Thermal with Gas Assist	380	**380**	0	
Wind Electricity	0	**0**	0	

* Expressed in CO2 equivalents

** used net emissions from Table 2 (2000 Study)

Graph of Table 3 Data



ATTACHMENT 7
ADOPTED INTERIM EPS RULES

ATTACHMENT 7
Page 1

ADOPTED INTERIM RULES FOR GREENHOUSE GAS EMISSIONS PERFORMANCE STANDARD (ADOPTED INTERIM EPS RULES)

These interim rules govern the design and implementation of the greenhouse gas (GHG) emissions performance standard (or "EPS") adopted by the California Public Utilities Commission ("Commission") pursuant to Senate Bill 1368. Appendix 1 presents a flow chart illustrating how the EPS will be applied under the interim rules.

1. Terms and Definitions

For the purpose of the Interim EPS Rules ("rules"), the following terms have the following meanings:

(a) *Baseload generation* means electricity generation from a powerplant that is designed and intended to provide electricity at an annualized plant capacity factor of at least 60 percent, where:

(i) *Powerplant* means a facility for the generation of electricity, and includes one or more generating units at the same location. A powerplant is considered to be a generation facility comprised of more than one generating unit ("multi-unit") for the purpose of applying the EPS rule if: (1) the units are at the same location *and* (2) each unit utilizes the same resource (fuel) or technology, *and* (3) one or more of the units are operationally dependent on another.[1] The terms "powerplant" and "facility" are used interchangeably in these rules.

(ii) *Annualized plant capacity factor* is the ratio of the annual amount of electricity produced, measured in kilowatthours (kWh), divided by the annual amount of electricity the powerplant could have produced if it had been operated at its maximum permitted capacity, expressed in kWh. For the purpose of this calculation, "permitted" capacity is the rated capacity of the powerplant as defined under (h) below, unless the maximum output allowed under the operating permit is the effective constraint on the maximum output of the facility. In those instances, the

[1] For example, there are ten different 15 MW gas-fired units strung together utilizing a reciprocating generation technology to provide a total output capability of 150 MW, and you need to have one unit on to run any of the others. Or you may have a 100 MW CT comprised of a 10 MW quick-start unit and a 90 MW unit strung together, so that you could never get MWs 11 to 100 unless you have 0-10 on.

denominator of this equation should reflect the maximum output allowed under the permit, rather than the rated capacity.[2]

(b) *Combined cycle gas turbine ("CCGT") powerplant* means a powerplant that employs a combination of one or more gas turbines and steam turbines in which electricity is produced in the steam turbine from otherwise lost waste heat exiting from one or more of the gas turbines.

(c) *Community choice aggregator* means a "community choice aggregator" as defined in Public Utilities Code § 218.[3]

(d) *Deemed-compliant CCGT powerplant* means a CCGT powerplant that is in operation as of the effective date of these rules, or that has a California Energy Commission (CEC) final permit decision to operate as of June 30, 2007. (e) *Electrical corporation* means an "electrical corporation" as defined in Public Utilities Code § 218.

(f) *Electric service provider* means an "electric service provider" as defined in § 218.3, but does not include corporations or persons employing cogeneration technology or producing electricity from other than a conventional power source consistent with subdivision (b) of § 218.(g) *Net emissions* means the net change in emissions resulting from the production of electricity by the baseload generation. For facilities generating electricity from biomass, biogas, or landfill gas energy, net emissions represent the net change in emissions from the process of growing, processing and generating the electricity from the fuel source.

(h) *Rated capacity* means the powerplant's maximum rated output under specific conditions designated by the manufacturer and usually indicated on a nameplate physically attached to the generator.

(i) *Renewable energy credits (or "RECs")* refer to the attributes of a renewable resource (including GHG emissions attributes) that may be traded or sold in a market.

(j) *Term of a contract* is defined as the date of first delivery through the date of last delivery, even if there are intervening periods during which there are no deliveries.

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[2] In their showings of whether the EPS applies to a new long-term financial commitment (other than new plant construction), LSEs should include historical plant capacity factors for the underlying facility or facilities to document the annualized plant capacity factor, per the definition above. See the Commission's decision adopting these rules for compliance documentation requirements.

[3] All subsequent section numbers refer to the Public Utilities Code unless otherwise indicated.

2. Entities Subject to the EPS

The EPS applies to every electrical corporation, electric service provider, or community choice aggregator[4] serving end-use customers in California, collectively referred to as load-serving entities or "LSEs" in these rules.

3. Covered Procurements

The EPS applies to baseload generation. However, the requirement to comply with the EPS is triggered only if there is a long-term financial commitment by an LSE. For LSE-owned powerplants, a long-term financial commitment occurs when there is a new ownership investment. For baseload generation procured under contract, there is a long-term financial commitment when the LSE enters into a new or renewed contract with a term of five or more years. Long-term financial commitments subject to the EPS are referred to as "covered procurements" under these rules, which are as follows:

(1) New ownership investments in baseload generation made by an LSE, defined as:

   (a) Investments in new baseload powerplant (new construction).

   (b) Acquisition of new or additional ownership interest in existing baseload powerplant previously owned by others.

   (c) New investments in the LSE's own existing, non-CCGT baseload powerplants that : 1) are designed and intended to extend the life of one or more units by five years or more, 2) result in a net increase in the rated capacity of the powerplant, or 3) are designed and intended to convert a non-baseload powerplant to a baseload powerplant, or

   (d) Units added to a deemed-compliant CCGT powerplant that result in an increase of 50 megawatts (MW) or more to the powerplant's rated capacity, or

(2) New contract commitments (including renewal contracts) with a term of five years or greater by an LSE with:

   (a) baseload generation facilities, unless those facilities represent deemed-compliant CCGT powerplants, or

   (b) any deemed-compliant CCGT powerplant that added units resulting in an increase of 50 MW or more to the powerplant's rated capacity.

[4] To date, no community choice aggregator has been formed, though interest has been expressed in a number of localities.

Under (1)(c) above, only those units in a multi-unit generating facility that are being added, replaced or altered must comply with the EPS. In any event, additional units may be considered separate, new plants (see definition of powerplant under Section 1), in which case they will be covered procurements under (1)(a) above.

Under (1)(d) and (2)(b) above, only the additional units must demonstrate compliance with the EPS, where "additional" units refer to units that were not previously operating at that specific powerplant (including additional refurbished or used units previously operating at a different powerplant). For the purpose of establishing when there has been a 50 MW addition, the existing rated capacity will be determined as follows: 1) for all CCGT powerplants that are in operation on the effective date of this decision—the rated capacity of the powerplant that is operating, or 2) for all other powerplants (or additions to powerplants) that obtain a CEC final permit to operate by June 30, 2007—the rated capacity authorized by the permit.

For the purpose of determining the "term" of a contract under section (2) above, two or more contracts, including contractual options, should be treated as one where:

(1) They specify the same powerplant as the primary delivery source or, for an unspecified source, they are with the same counter-party; ***and***

(2) They are negotiated or executed within any 3 consecutive-month period, except if entered into as a result of separate Requests for Offers (RFO) and the contract from the earlier RFO is executed before the later RFO has received any bids (either indicative or final).

4. EPS Performance Level (Emissions Rate)

LSEs must demonstrate that the net emissions rate of each baseload facility underlying a covered procurement is no higher than 1,100 lbs of carbon dioxide (CO_2) per megawatt hour (MWh).

5. Pre-Approved Renewable Resources and Technologies

Baseload powerplants generating electricity using the following renewable resources and technologies are pre-approved as EPS compliant, and therefore the LSE does not need to calculate the net emissions from powerplants utilizing these generation sources to demonstrate compliance with the EPS:

- Solar Thermal Electric (with up to 25% gas heat input)
- Wind
- Geothermal, with or without Reinjection
- Generating facilities (e.g., agricultural and wood waste, landfill gas) using biomass that would otherwise be disposed of utilizing open

burning, forest accumulation, landfill (uncontrolled, gas collection with flare, gas collection with engine), spreading or composting.

6. Calculation of Net Emissions Rates

The determination of whether a covered procurement complies with the EPS will be based on the calculation of net emissions from each baseload powerplant underlying that commitment.

Full load heat rates shall not be used to calculate net emissions rates. Capacity factors, heat rates and corresponding emissions rates shall reflect the actual, expected operations of the powerplant.

For the purpose of demonstrating compliance with the EPS, the emissions rates for renewables will be calculated based on the operation and emissions profile of the renewable resource, irrespective of whether renewable energy credits or "RECs" associated with that facility have been sold.

The net emissions from each baseload powerplant underlying a covered procurement may not be offset, averaged or blended in any manner. A purchased REC cannot be used by an LSE to lower the emissions of a baseload facility for the purpose of demonstrating EPS compliance.

A. Biomass

The calculation of emissions by facilities generating electricity from biomass that is grown (or disposed of using methods other than those that are pre-approved as EPS compliant under Section 5) shall reflect the net emissions from the process of growing, processing and generating the electricity from the fuel source. This calculation of net emissions shall also include the CO_2 equivalent of methane gas emissions associated with these processes.

B. CO_2 Sequestration

Carbon dioxide that is injected in geological formations, so as to prevent releases into the atmosphere, will not be counted as emissions of the powerplant in determining compliance with the EPS, provided that:

(1) The CO_2 injection project complies with applicable laws and regulations and,

(2) The CO_2 capture, transportation and geological formation injection project has a reasonable and economically and technically feasible plan that will result in a permanent sequestration of CO_2 once the injection project is operational.

Any covered procurements with a baseload facility utilizing such CO_2 sequestration projects will still need to meet the EPS, but in calculating the net emissions rate the CO_2 that is sequestered through injection in geological formations will not be counted. The calculations of net emissions will be based on reasonably projected net emissions over the life of the facility, which recognizes that in some instances the sequestration project may become operational after the powerplant comes on line or the LSE enters into the contract.

C. Cogeneration

The Conversion Method will be used to calculate the net emissions rate associated with cogeneration, utilizing the following formula for both topping and bottoming-cycle cogeneration technologies:

TOTAL GHG EMISSIONS FROM COGENERATION FACILITY
KWH ELECTRICITY + USEFUL THERMAL ENERGY OUTPUT
(expressed in kWh)

"Useful thermal energy output" is converted into a kWh equivalent using the standard engineering conversion factor of 3.413 MMBtu per MWh (or 3413 Btu per kWh) and refers to "useful thermal energy" as defined under Federal Energy Regulatory Commission (FERC) regulations mandating the minimum efficiencies of a cogeneration qualifying facility (QF). For bottoming-cycle cogeneration, the "energy input" used to produce total GHG emissions in the numerator should reflect the energy input used to produce the thermal energy output for the industrial process as well as any supplemental fuel used for supplementary firing (for electricity generation).

The emissions rate for cogeneration facilities will be calculated using the values for energy input, useful power output and useful thermal energy output submitted by the cogenerator to the interconnecting utility in the annual questionnaires demonstrating compliance with FERC efficiency standards. For new cogeneration facilities, when this questionnaire has not been submitted to the utility, the emissions rate calculation will be based on available energy input, useful power output and useful thermal energy output information in FERC Form 556, required for QF certification.

7. Substitute Energy Provisions

Contract commitments with a term of five years or more may contain provisions for the seller to substitute deliveries from specified powerplants with energy purchases from unspecified resources ("system" energy) under the following circumstances:

1. The contract is with one or more specified powerplants, each of which is EPS-compliant under the interim EPS rules.

2. For specified contracts with non-renewable resources or dispatchable renewable resources (or a combination of each), substitute energy purchases for each specified powerplant are permitted up to 15% of forecast energy production of the specified powerplant over the term of the contract, provided that the contract only permits the seller to purchase system energy under either of the following conditions:

    a) The contract permits the seller to provide system energy when the powerplant is unavailable due to a forced outage, scheduled maintenance or other temporary unavailability for operational or efficiency reasons; or

    b) The contract permits the seller to provide system energy to meet operating conditions required under the contract, such as provisions for number of start-ups, ramp rates, minimum number of operating hours, etc.

    A "dispatchable" renewable resource for the purpose of this rule is one that is not defined as "intermittent" under section 3 below.

3. For specified contracts with intermittent renewable resources (defined as solar, wind and run-of-river hydroelectricity), the amount of substitute energy purchases from unspecified resources is limited such that total purchases under the contract (whether from the intermittent renewable resource or from substitute unspecified sources) do not exceed the total expected output of the specified renewable powerplant over the term of the contract.

8. Application of EPS to Covered Procurements:

All covered procurements, including contract commitments, must be with specified resources that can demonstrate compliance (or demonstrate that compliance is not required) with the interim EPS, except when substitute system energy is purchased to firm deliveries from specified powerplants subject to the restrictions described Section 7 above. "Specified" means that the covered procurement (including a contract commitment) identifies the individual powerplant(s) that will be delivering power.

Determining whether the EPS applies to a contract commitment will be made based on the characteristics of the individual powerplant(s) underlying the contract and not on the contracted-for deliveries.[5] This applies to all covered procurements, including partial year (e.g., seasonal) contracts and contracts with customer generators. For contracts with multiple specified generating sources, each source (powerplant) must

[5] See the definition of "powerplant" under Section 1 above.

be treated individually for the purpose of determining both the annualized capacity factor and net emissions, including contracts for firmed renewable products. However, the following circumstances would comply with the interim EPS:

(1) If the long-term contract (i.e., with a term of five years or longer) specifies that power will be delivered exclusively from pre-approved renewable technologies or resources, and there are assurances in the contract to that effect, then the contract would comply with the EPS even if none of the generating sources are specified.

(2) If a group of powerplants from which power will be delivered under a contract is specified, and there are assurances in the contract that deliveries will only be from one or more of the powerplants in that group *and* each of those that are baseload powerplants would individually pass the EPS, then the contract would comply with the EPS.

Appendix 1 presents a flow chart illustrating how the EPS will be applied under the Interim EPS Rules. As Appendix 1 illustrates, the rules are applied using a "gateway screen" approach. Under this approach, a series of questions and criteria reflecting the rules are applied to first determine whether or not the LSE's financial commitment is a covered procurement subject to the EPS. If it is, then the commitment is screened to ensure that the associated GHG emissions rate does not exceed the adopted EPS performance level. Once the financial commitment successfully passes through the gateway screen, the LSE has demonstrated EPS compliance for that particular commitment. Ongoing Commission review or monitoring of the facilities underlying that commitment is not required.

9. Exemptions from the Interim EPS Rules

Reliability exemptions from the EPS may be authorized on a case-by-case basis if the LSE can demonstrate that a long-term commitment to unspecified power or a non-compliant specified powerplant is necessary to address system reliability concerns. LSEs will not be excused from the requirements of these rules for any other reason unless they can clearly demonstrate:

(a) They are facing extraordinary circumstances, catastrophic events or threat of significant financial harm not contemplated by SB 1368 and the Commission's decision adopting these rules, and

(b) An exemption from some requirement of the rules is necessary to significantly mitigate or eliminate the challenges posed by these circumstances.

Any requests for a reliability exemption or to be excused from the requirements of the rules for such "extraordinary circumstances" must be pre-approved by the

Commission. Any LSE requesting Commission consideration of such requests must comply with the pre-approval filing procedures and documentation requirements established by the Commission in R.06-04-009. Commission consideration of such requests comes with a heavy burden of proof on the LSE.

10. Procedures and Documentation Requirements for Demonstrating Compliance

In demonstrating compliance with these rules, LSEs must follow the procedures and documentation requirements established by the Commission in R.06-04-009.

11. Duration of the Interim EPS Rules

These rules will remain in effect unless modified by subsequent Commission order. Pursuant to § 8341(g), the Commission will reevaluate and continue, modify or replace the interim EPS through a rulemaking, and in consultation with the California Energy Commission and the California Air Resources Board, when an enforceable GHG emissions limit applicable to LSEs is established and in operation.

Attachment 7 – Appendix 1
Flow Chart of Interim GHG Emissions Performance Standard

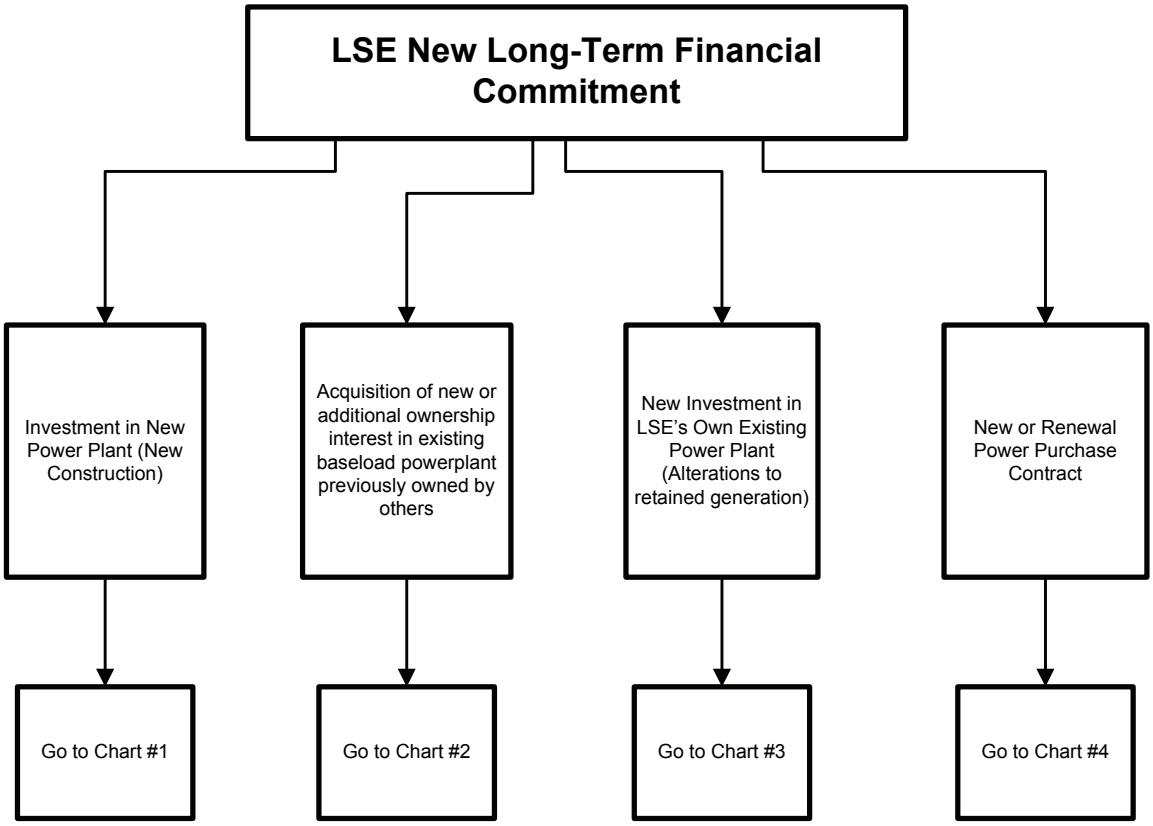

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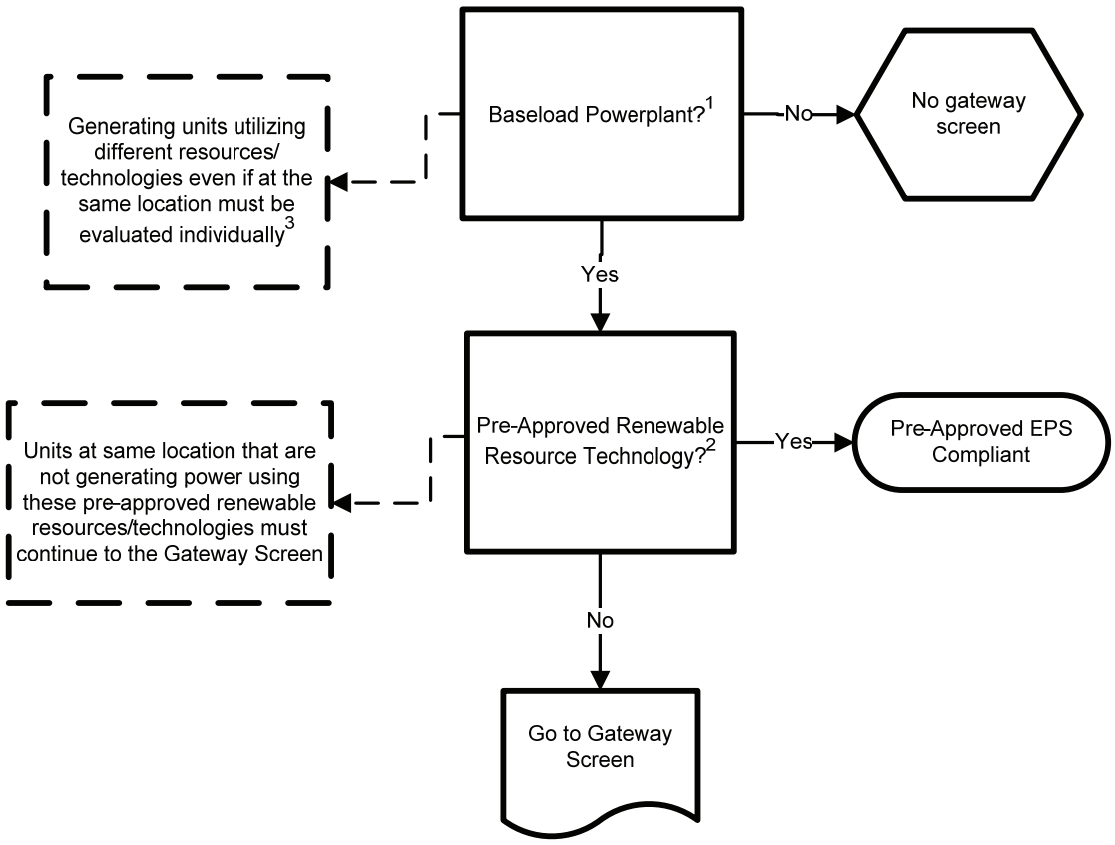
Chart #1
LSE Investment in New Power Plant (New Construction)



[1] Is the investment being made to a generating facility designed and intended to provide electricity at an annualized capacity factor of 60% or greater?

[2] Pre-approved technologies include: Solar thermal electric (with up to 25% gas heat assist); wind; geothermal (with or without reinjection); generating facilities using biomass (e.g. agricultural and wood waste, landfill gas) that would otherwise dispose of the biomass utilizing open burning, forest accumulation, landfill (uncontrolled, flare, or engine), spreading or composting

[3] See Rules on what constitutes a “multi-unit” powerplant.

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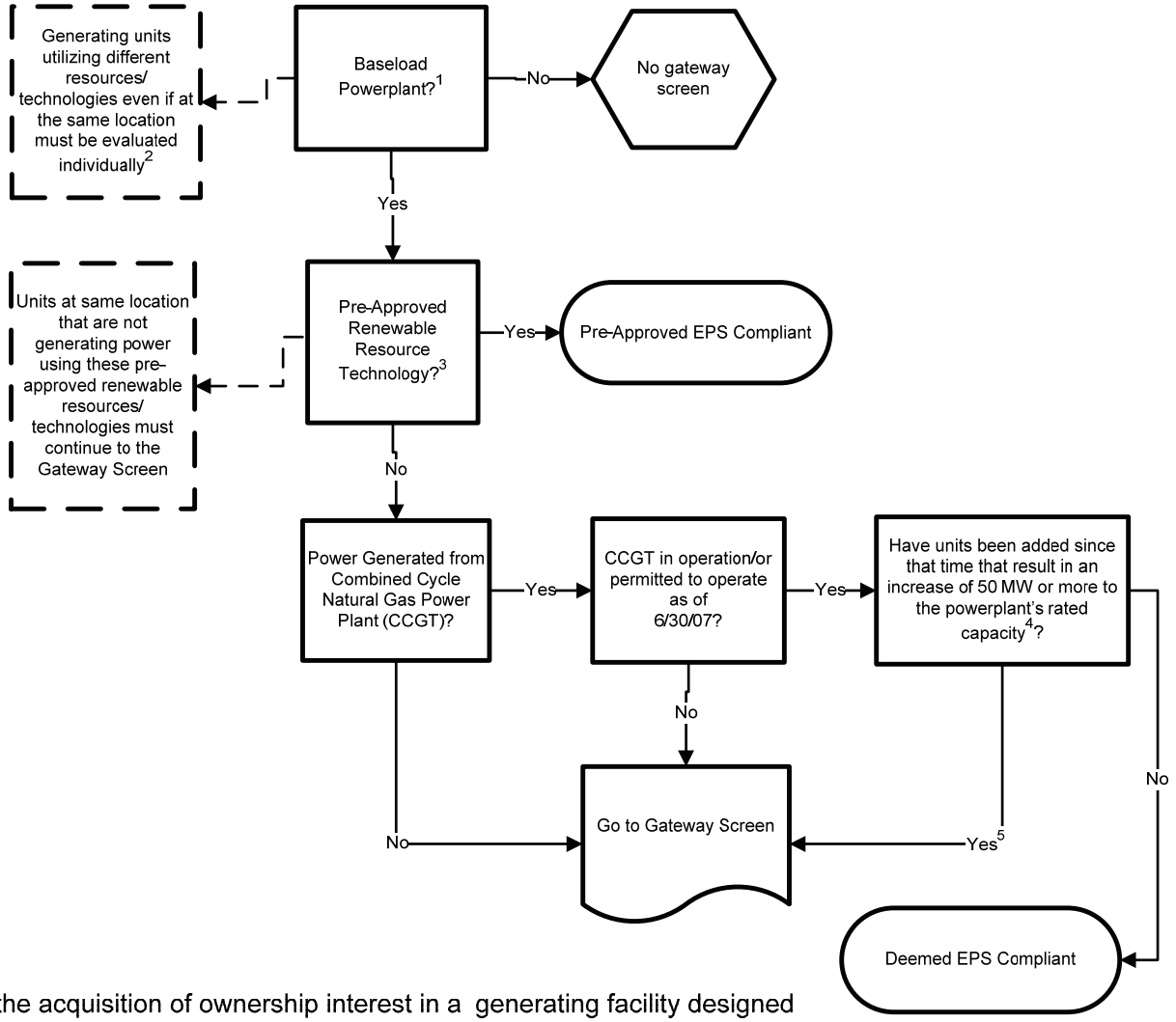
Chart #2
LSE Acquisition of New or Additional Ownership Interest in Existing Baseload Powerplant Previously Owned by Others



[1] Is the acquisition of ownership interest in a generating facility designed and intended to provide electricity at an annualized capacity factor of 60% or greater?

[2] See Rules on what constitutes a "multi-unit" powerplant.

[3] Pre-approved technologies include: Solar thermal electric (with up to 25% gas heat assist); wind; geothermal (with or without reinjection); generating facilities using biomass (e.g. agricultural and wood waste, landfill gas) that would otherwise be disposed of utilizing open burning, forest accumulation, landfill (uncontrolled, gas collection with flare or engine), spreading or composting.

[4] The rated capacity of CCGTs for the purpose of establishing when the 50MW addition is reached will be: 1) for all CCGT plants that are in operation on the effective date of this decision – the rated capacity of the plant that is operating, or 2) for all other CCGT plans (or additions to plants) that obtain a CEC final permit to operate as of June 30, 2007 – the rated capacity authorized by the permit.

[5] Only the units that have been added must comply with the EPS

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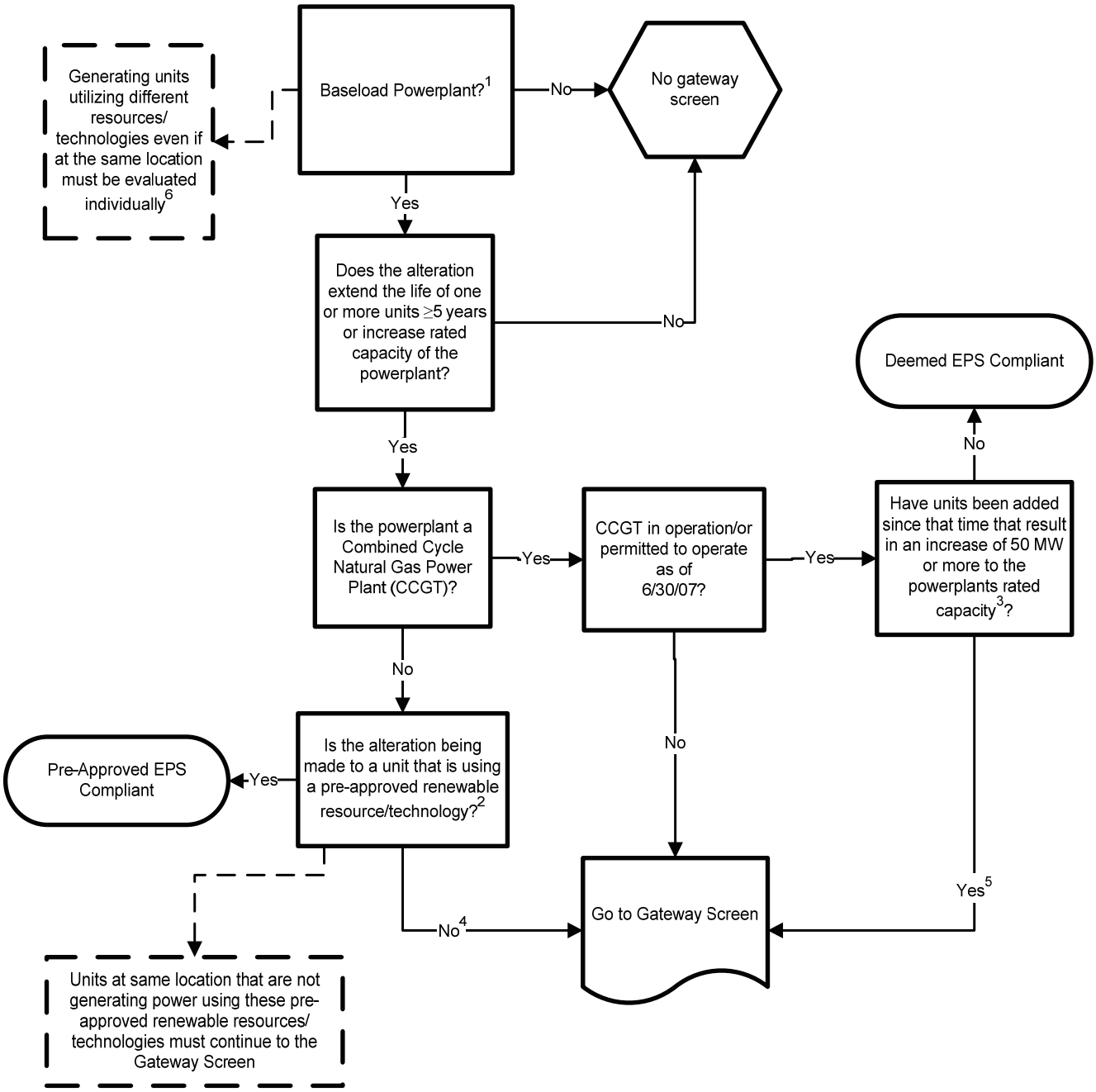
Chart #3
LSE New Investment in its Own Existing Powerplant
(Alterations to Retained Generation)



Please see footnotes on next page

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Chart #3
LSE New Investment in its Own Existing Powerplant (Alterations to Retained Generation)

Footnotes

[1] Is the investment being made to a generating facility designed and intended to provide electricity at an annualized capacity factor of 60% or greater? Or is the investment being made to a non-baseload generating facility so that it is now designed and intended to provide electricity at an annualized capacity factor of 60% or greater?

[2] Pre-approved technologies include: Solar thermal electric (with up to 25% gas heat assist); wind; geothermal (with or without reinjection); generating facilities using biomass (e.g. agricultural and wood waste, landfill gas) that would otherwise be disposed of utilizing open burning, forest accumulation, landfill (uncontrolled, gas collection with flare or engine), spreading or composting.

[3] The rated capacity of CCGTs for the purpose of establishing when the 50MW addition is reached will be: 1) for all CCGT plants that are in operation on the effective date of this decision – the rated capacity of the plant that is operating, or 2) for all other CCGT plans (or additions to plants) that obtain a CEC final permit to operate as of June 30, 2007 – the rated capacity authorized by the permit.

[4] Only those units that are being added, replaced or altered must comply with the EPS. In any event, additional units may be considered separate "new" powerplants, based on the EPS rules, to be evaluated under Chart #1.

[5] Only those units that have been added must comply with the EPS.

[6] See Rules on what constitutes a "multi-unit" powerplant.

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Chart #4
LSE New or Renewal Power Purchase Contract

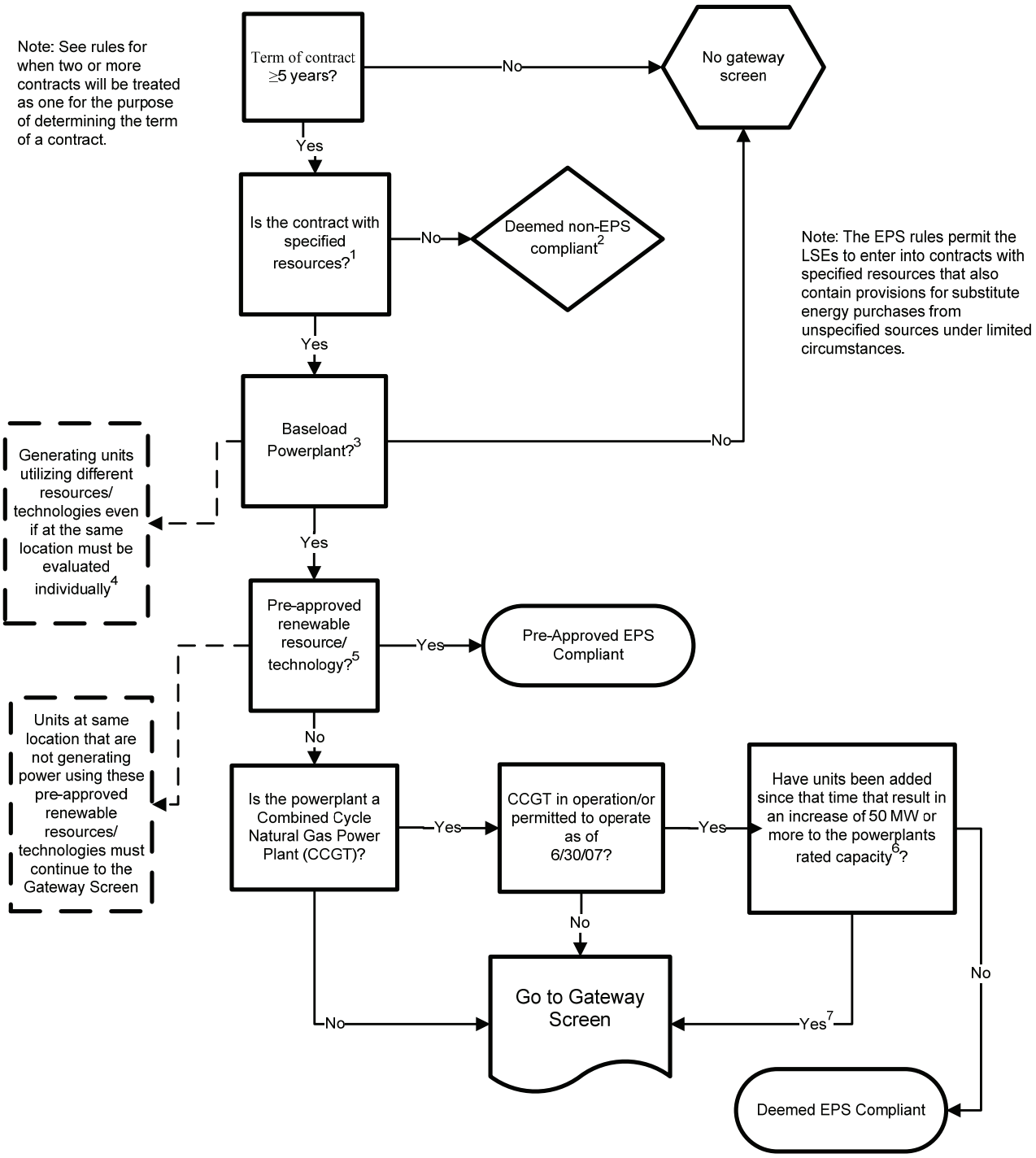

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Chart #4
LSE New or Renewal Power Purchase Contract

Footnotes

[1]"Specified" means that the contract identifies the individual powerplant(s) that will be delivering power, and each must pass the EPS screening process. However, the long-term contract (i.e., with a term of five years or longer) could also comply with the interim EPS under the following circumstances (not illustrated here):

(1) If the contract specifies that power will be delivered exclusively from pre-approved renewable technologies or resources, or , and there are assurances in the contract to that effect, or

(2) If a group of powerplants from which power will be delivered under a contract is specified, and there are assurances in the contract that deliveries will only be from one or more of the powerplants in that group *and* each of those that are baseload powerplants would individually pass the EPS.

[2]LSE may request case-by-case commission review/approval of reliability exemptions.

[3] Is the contract with a generating facility designed and intended to provide electricity at an annualized capacity factor of 60% or greater?

[4] See Rules on what constitutes a "multi-unit" powerplant.

[5]Pre-approved technologies include: Solar thermal electric (with up to 25% gas heat assist); wind; geothermal (with or without reinjection); generating facilities using biomass (e.g. agricultural and wood waste, landfill gas) that would otherwise be disposed of utilizing open burning, forest accumulation, landfill (uncontrolled, gas collection with flare or engine), spreading or composting

[6] The rated capacity of CCGTs for the purpose of establishing when the 50MW addition is reached will be: 1) for all CCGT plants that are in operation on the effective date of this decision – the rated capacity of the plant that is operating, or 2) for all other CCGT plans (or additions to plants) that obtain a CEC final permit to operate as of June 30, 2007 – the rated capacity authorized by the permit.

[7]Only the units that have been added must comply with the EPS.

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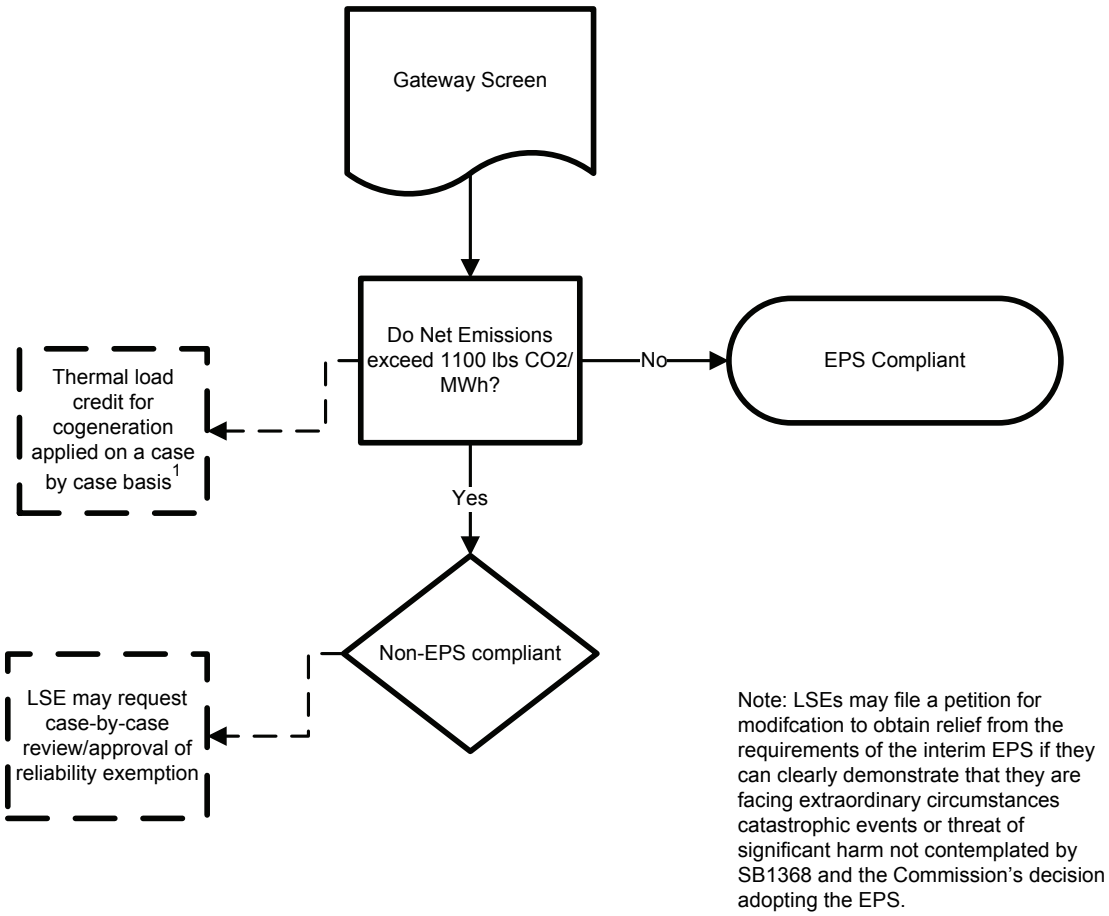
EPS Gateway Screen



[1] Credit will be calculated using Commission-adopted methodology.

(END OF ATTACHMENT 7)