# **BILL ANALYSIS**

C.S.H.B. 2446 By: Crownover Energy Resources Committee Report (Substituted)

# BACKGROUND AND PURPOSE

Industry experts explain that carbon dioxide has been used in enhanced oil recovery operations to recover oil in Texas for decades and that oil recovered from such operations constitutes as much as 25 percent of all oil recovered during that period. These experts estimate that tens of billions of barrels of additional oil could be recovered with conventional carbon dioxide enhanced oil recovery technologies. However, the experts agree that anthropogenic carbon dioxide must be taken into account in order to fully realize the potential of this type of oil recovery.

Interested parties note that previous legislation sought to address the development of a market for the capture of anthropogenic carbon dioxide emissions from power plants and the use of that carbon dioxide for enhanced oil recovery. While it appears that no project has yet commenced construction, these parties assert that several projects could come to Texas if market factors become more favorable to support the economic viability of such projects. Although the previous legislation reportedly focused on carbon dioxide emissions from coal and lignite power plants, the realm of potential projects has expanded over time, with the most recently announced project involving a natural gas power plant. C.S.H.B. 2446 seeks to extend the applicability of these prior measures to other types of fuel, as long as the emissions profile requirements are met, among other provisions.

## **RULEMAKING AUTHORITY**

It is the committee's opinion that rulemaking authority is expressly granted to the comptroller of public accounts in SECTION 7 of this bill, the Texas Commission on Environmental Quality in SECTION 8 of this bill, and the Railroad Commission of Texas in SECTION 9 of this bill.

## ANALYSIS

C.S.H.B. 2446 transfers Subchapter H, Chapter 490, Government Code, to Chapter 171, Tax Code, redesignated as Subchapter L, Chapter 171, Tax Code, and amends it to authorize the entity designated in the certificate of compliance for a clean energy project to assign the credit to one or more taxable entities and authorizes a taxable entity to which the credit is assigned to claim the credit against the tax imposed under law relating to franchise tax. The bill removes language specifying that the amount of the franchise tax credit for each report year is calculated by determining the amount of franchise tax that is due based on the taxable margin generated by a clean energy project from the generation and sale of power and the sale of any products that are produced by the electric generation facility.

C.S.H.B. 2446 establishes that the total credit that a taxable entity may claim for a clean energy project for a report, including the amount of any carryforward credit, may not exceed the amount of franchise tax due by the taxable entity for the report after any applicable tax credits, instead of establishing that the amount of the franchise tax credit that may be claimed for a clean energy project for a report year may not exceed the amount of franchise tax attributable to the clean energy project for that report year. The bill authorizes the taxable entity, if the entity is eligible to

claim a credit that exceeds the limitation on the amount of the tax credit, to carry the unused credit forward for not more than 20 consecutive reports. The bill specifies a carryforward is considered the remaining portion of the credit that the taxable entity does not claim in the current year because of the limitation. The bill prohibits the comptroller of public accounts from issuing a credit for a clean energy project before the later of September 1, 2018, or the expiration of an agreement under the Texas Economic Development Act regarding the clean energy project for which the credit is issued, rather than prohibiting the comptroller from issuing such a credit before September 1, 2013.

C.S.H.B. 2446 amends the Health and Safety Code to redefine "advanced clean energy project" under the Texas Clean Air Act to include natural gas among the fuels involved in the generation of electricity for such a project. The bill, in the definition of advanced clean energy project, establishes that such a project be capable of achieving on an annual basis with regard to the portion of the emissions stream from the facility that is associated with the project, a sulfur dioxide emission rate that meets best available control technology requirements as determined by the Texas Commission on Environmental Quality (TCEQ) if the project is designed for the use of one or more combustion turbines that burn natural gas, as an alternative to certain other capabilities. The bill, in a provision that specifies that a project be capable of achieving on an annual basis a 95 percent or greater reduction of mercury emissions, clarifies that this provision applies only if applicable.

C.S.H.B. 2446 amends the Natural Resources Code to redefine "clean energy project" as applicable to provisions relating to the verification, monitoring, and certification of such a project to add a project to construct a natural gas-fueled electric generating facility. The bill, in a provision authorizing an entity to apply to TCEQ for a certification that a project operated by the entity meets the requirements for a clean energy project, specifies that the entity may do so on or after September 1, 2018. The bill specifies that not more than one of the three clean energy projects under a TCEQ-issued certificate of compliance may be a natural gas project.

C.S.H.B. 2446 requires TCEQ to adopt rules as necessary to implement the bill's provisions regarding the Texas Clean Air Act not later than January 1, 2014; authorizes the Railroad Commission of Texas to adopt rules as necessary to implement the bill's provisions regarding the verification, monitoring, and certification of a clean energy project; and requires the comptroller to adopt rules under provisions relating to a credit for a clean energy project as added by the bill not later than January 1, 2014. The bill specifies that its provisions do not apply to a clean energy project that includes a precombustion integrated gasification combined cycle technology with carbon capture and was selected by the United States Department of Energy for a Clean Coal Power Initiative award before February 1, 2010, and specifies that such a project is governed by the law in effect immediately before the effective date of the bill.

# EFFECTIVE DATE

On passage, or, if the bill does not receive the necessary vote, September 1, 2013.

## **COMPARISON OF ORIGINAL AND SUBSTITUTE**

While C.S.H.B. 2446 may differ from the original in minor or nonsubstantive ways, the following comparison is organized and highlighted in a manner that indicates the substantial differences between the original and committee substitute versions of the bill.

INTRODUCED

HOUSE COMMITTEE SUBSTITUTE

SECTION 1. Section 382.003(1-a), Health

SECTION 2. Section 382.003(1-a), Health

and Safety Code, is amended to read as follows:

(1-a) "Advanced clean energy project" means a project for which an application for a permit or for an authorization to use a standard permit under this chapter is received by the commission on or after January 1, 2008, and before January 1, 2020, and that:

(A) involves the use of coal, biomass, petroleum coke, solid waste, or fuel cells using hydrogen derived from such fuels, in the generation of electricity, or the creation of liquid fuels outside of the existing fuel production infrastructure while cogenerating electricity, whether the project is implemented in connection with the construction of a new facility or in connection with the modification of an existing facility and whether the project involves the entire emissions stream from the facility or only a portion of the emissions stream from the facility;

(B) with regard to the portion of the emissions stream from the facility that is associated with the project, is capable of achieving:

(i) on an annual basis, a 99 percent or greater reduction of sulfur dioxide emissions, <u>or:</u>

(a) if the project is designed for the use of one or more combustion turbines, an emission rate that meets best available control technology requirements as determined by the commission; or

(b) if the project is designed for the use of feedstock substantially all of which is subbituminous coal, an emission rate of 0.04 pounds or less of sulfur dioxide per million British thermal units as determined by a 30day average;

(ii) on an annual basis a 95 percent or greater reduction of mercury emissions, <u>if</u> <u>applicable</u>;

(iii) an annual average emission rate for nitrogen oxides of:

(a) 0.05 pounds or less per million British thermal units; or

(b) if the project uses gasification technology, 0.034 pounds or less per million British thermal units; and

(iv) an annual average emission rate for

and Safety Code, is amended to read as follows:

(1-a) "Advanced clean energy project" means a project for which an application for a permit or for an authorization to use a standard permit under this chapter is received by the commission on or after January 1, 2008, and before January 1, 2020, and that:

(A) involves the use of coal, biomass, petroleum coke, solid waste, <u>natural gas</u>, or fuel cells using hydrogen derived from such fuels, in the generation of electricity, or the creation of liquid fuels outside of the existing fuel production infrastructure while co-generating electricity, whether the project is implemented in connection with the construction of a new facility or in connection with the modification of an existing facility and whether the project involves the entire emissions stream from the facility or only a portion of the emissions stream from the facility;

(B) with regard to the portion of the emissions stream from the facility that is associated with the project, is capable of achieving:

(i) on an annual basis:

(a) a 99 percent or greater reduction of sulfur dioxide emissions:

(c) if the project is designed for the use of one or more combustion turbines that burn natural gas, a sulfur dioxide emission rate that meets best available control technology requirements as determined by the commission;

(b) [or,] if the project is designed for the use of feedstock, substantially all of which is subbituminous coal, an emission rate of 0.04 pounds or less of sulfur dioxide per million British thermal units as determined by a 30-day average; or

(ii) on an annual basis a 95 percent or greater reduction of mercury emissions, if applicable;

(iii) an annual average emission rate for nitrogen oxides of:

(a) 0.05 pounds or less per million British thermal units; or

(b) if the project uses gasification technology, 0.034 pounds or less per million British thermal units; and

(iv) an annual average emission rate for

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filterable particulate matter of 0.015 pounds or less per million British thermal units; and (C) captures not less than 50 percent of the carbon dioxide in the portion of the emissions stream from the facility that is associated with the project and sequesters that captured carbon dioxide by geologic storage or other means.

SECTION 2. Section 120.001(2), Natural Resources Code, is amended to read as follows:

(2) "Clean energy project" means a project to construct <u>ancoal-fueled or petroleum</u> <del>coke fueled</del> electric generating facility, including a facility in which the fuel is gasified before combustion, that will:

(A) have a capacity of at least 200 megawatts;

(B) meet the emissions profile for an advanced clean energy project under Section 382.003(1-a)(B), Health and Safety Code;

(C) capture at least 70 percent of the carbon dioxide resulting from or associated with the generation of electricity by the facility;

(D) be capable of permanently sequestering in a geological formation the carbon dioxide captured; and

(E) be capable of supplying the carbon dioxide captured for purposes of an enhanced oil recovery project.

SECTION 3. Subchapter H, Chapter 490, Government Code, section 490.352 is amended to read as follows:

Sec. 490.352. FRANCHISE TAX CREDIT FOR CLEAN ENERGY PROJECT. (a) The comptroller shall adopt rules for issuing to an entity implementing a clean energy project in this state a franchise tax credit. A clean energy project is eligible for a filterable particulate matter of 0.015 pounds or less per million British thermal units; and (C) captures not less than 50 percent of the carbon dioxide in the portion of the emissions stream from the facility that is associated with the project and sequesters that captured carbon dioxide by geologic storage or other means.

SECTION 3. Section 120.001(2), Natural Resources Code, is amended to read as follows:

(2) "Clean energy project" means a project to construct a coal-fueled, <u>natural gas-</u> <u>fueled</u>, or petroleum coke-fueled electric generating facility, including a facility in which the fuel is gasified before combustion, that will:

(A) have a capacity of at least 200 megawatts;

(B) meet the emissions profile for an advanced clean energy project under Section 382.003(1-a)(B), Health and Safety Code;

(C) capture at least 70 percent of the carbon dioxide resulting from or associated with the generation of electricity by the facility;

(D) be capable of permanently sequestering in a geological formation the carbon dioxide captured; and

(E) be capable of supplying the carbon dioxide captured for purposes of an enhanced oil recovery project.

SECTION 1. Subchapter H, Chapter 490, Government Code, is transferred to Chapter 171, Tax Code, redesignated as Subchapter L, Chapter 171, Tax Code, and amended to read as follows:

SUBCHAPTER <u>L.</u> [H. FRANCHISE] TAX CREDIT FOR CLEAN ENERGY PROJECT

Sec. <u>171.651</u> [490.351]. DEFINITION. In this subchapter, "clean energy project" has the meaning assigned by Section 120.001, Natural Resources Code.

Sec. <u>171.652.</u> [490.352. FRANCHISE] TAX CREDIT FOR CLEAN ENERGY PROJECT. (a) The comptroller shall adopt rules for issuing to an entity implementing a clean energy project in this state a [franchise tax] credit against the tax

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franchise tax credit only if the project is implemented in connection with the construction of a new facility.

(b) The comptroller shall issue a franchise tax credit to an entity operating a clean energy project after:

(1) the Railroad Commission of Texas has issued a certificate of compliance for the project to the entity as provided by Section 120.004, Natural Resources Code;

(2) the construction of the project has been completed;

(3) the electric generating facility associated with the project is fully operational;

(4) the Bureau of Economic Geology of The University of Texas at Austin verifies to the comptroller that the electric generating facility associated with the project is sequestering at least 70 percent of the carbon dioxide resulting from or associated with the generation of electricity by the facility; and

(5) the owner or operator of the project has entered into an interconnection agreement relating to the project with the Electric Reliability Council of Texas.

(c) The total amount of the franchise tax credit that may be issued to the entity designated in the certificate of compliance for a clean energy project is equal to the lesser of:

(1) 10 percent of the total capital cost of the project, including the cost of designing, engineering, permitting, constructing, and commissioning the project, the cost of procuring land, water, and equipment for the project, and all fees, taxes, and commissions paid and other payments made in connection with the project but excluding the cost of financing the capital cost of the project; or

## (2) \$100 million.

(d) <u>The entity designated in the certificate of</u> compliance for the project may assign the franchise tax credit to any other entity that has or acquires an interest in the income generated by the project in proportion to their ownership in the project. imposed under this chapter. A clean energy project is eligible for a [franchise tax] credit only if the project is implemented in connection with the construction of a new facility.

(b) The comptroller shall issue a [franchise tax] credit to an entity operating a clean energy project after:

(1) the Railroad Commission of Texas has issued a certificate of compliance for the project to the entity as provided by Section 120.004, Natural Resources Code;

(2) the construction of the project has been completed;

(3) the electric generating facility associated with the project is fully operational;

(4) the Bureau of Economic Geology of The University of Texas at Austin verifies to the comptroller that the electric generating facility associated with the project is sequestering at least 70 percent of the carbon dioxide resulting from or associated with the generation of electricity by the facility; and

(5) the owner or operator of the project has entered into an interconnection agreement relating to the project with the Electric Reliability Council of Texas.

(c) The total amount of the **franchise tax**] credit that may be issued to the entity designated in the certificate of compliance for a clean energy project is equal to the lesser of:

(1) 10 percent of the total capital cost of the project, including the cost of designing, engineering, permitting, constructing, and commissioning the project, the cost of procuring land, water, and equipment for the project, and all fees, taxes, and commissions paid and other payments made in connection with the project but excluding the cost of financing the capital cost of the project; or

(2) \$100 million.

(e) <u>The entity designated in the certificate</u> of compliance for a clean energy project may assign the credit to one or more taxable <u>entities.</u>

A taxable entity to which the credit is assigned may claim the credit against the tax imposed under this chapter subject to the conditions and limitations of this The amount of the franchise tax credit for each report year is calculated by determining the amount of franchise tax that is due based on the taxable margin generated by a clean energy project from the generation and sale of power and the sale of any products that are produced by the electric generation facility. The amount of the franchise tax credit claimed under this section for a report year may not exceed the amount of franchise tax <u>due to the state from an entity claiming</u> the credit attributable to the clean energy project for that report year. Any unused credit may be carried forward for up to 20 years.

(e) The comptroller may not issue a franchise tax credit under this section before September 1, 2018<del>3</del>

or while a valuation cap agreement under Chapter 313, Tax Code is in effect for the project. This subsection expires September 2, 2013.

SECTION 4. The Texas Commission on Environmental Quality shall adopt rules as necessary to implement Section 382.003, Health and Safety Code, as amended by this Act, not later than January 1, 2014.

SECTION 5. The Railroad Commission of Texas may adopt rules as necessary to implement section 120.001(2), Natural Resources Code, as amended by this Act.

SECTION 6. The comptroller shall adopt rules under Section 490.352, Government Code, as added by this Act, not later than January 1, 2014.

#### subchapter.

(d) [The amount of the franchise tax credit for each report year is calculated by determining the amount of franchise tax that is due based on the taxable margin generated by a clean energy project from the generation and sale of power and the sale of any products that are produced by the electric generation facility.] The total [amount of the franchise tax] credit that a taxable entity may claim [elaimed] under this section for a report, including the amount of any carryforward credit, [year] may not exceed the amount of franchise tax due by the taxable entity for the report after any applicable tax credits [attributable to the clean energy project for that report year]. If a taxable entity is eligible to claim a credit that exceeds the limitation of this subsection, the taxable entity may carry the unused credit forward for not more than 20 consecutive reports. A carryforward is considered the remaining portion of the credit that the taxable entity does not claim in the current year because of the limitation. (f) The comptroller may not issue a [franchise tax] credit under this section before the later of:

(1) September 1, 2018; or

(2) the expiration of an agreement under Chapter 313 regarding the clean energy project for which the credit is issued [2013. This subsection expires September 2, 2013].

SECTION 8. Not later than January 1, 2014, the Texas Commission on Environmental Quality shall adopt rules as necessary to implement the change in law made by this Act to Section 382.003, Health and Safety Code.

SECTION 9. The Railroad Commission of Texas may adopt rules as necessary to implement the change in law made by this Act to Section 120.001, Natural Resources Code.

SECTION 7. Not later than January 1, 2014, the comptroller of public accounts shall adopt rules necessary to implement Subchapter L, Chapter 171, Tax Code, as

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#### No equivalent provision.

No equivalent provision.

#### No equivalent provision.

redesignated and amended by this Act

SECTION 4. Section 120.002(b), Natural Resources Code, is amended to read as follows:

(b) <u>On or after September 1, 2018, an</u> [An] entity may apply to the commission for a certification that a project operated by the entity meets the requirements for a clean energy project. The application must be accompanied by:

(1) a certificate from a qualified independent engineer that the project is operational and meets the standards provided by Sections 120.001(2)(A), (B), and (C); and

(2) a fee payable to the commission.

SECTION 5. Section 120.003(a), Natural Resources Code, is amended to read as follows:

(a) An entity that applies to the commission under Section 120.002 for a certification that a project operated by the entity meets the requirements for a clean energy project is responsible for conducting a monitoring, measuring, and verification process that demonstrates that the project complies with the requirements of Section 171.652(b)(4), Tax [490.352(b)(4), Government] Code.

SECTION 6. Section 120.004(b), Natural Resources Code, is amended to read as follows:

(b) The commission may not issue a certificate of compliance for more than three clean energy projects. <u>Not more than one of the three clean energy projects may be a natural gas project.</u>

#### No equivalent provision.

SECTION 10. The changes in law made by this Act do not apply to a clean energy project that includes a precombustion integrated gasification combined cycle technology with carbon capture and was selected by the United States Department of SECTION 7. This Act takes effect immediately if it receives a vote of twothirds of all the members elected to each house, as provided by Section 39, Article III, Texas Constitution. If this Act does not receive the vote necessary for immediate effect, this Act takes effect September 1, 2013.

Energy for a Clean Coal Power Initiative award before February 1, 2010. A clean that includes energy project а precombustion integrated gasification combined cycle technology with carbon capture and was selected by the United States Department of Energy for a Clean Coal Power Initiative award before February 1, 2010, is governed by the law in effect immediately before the effective date of this Act, and the former law is continued in effect for that purpose.

SECTION 11. Same as introduced version.