

**RENEWABLE ENERGY - METHANE GAS**

2010 GENERAL SESSION

STATE OF UTAH

**Chief Sponsor: Christine F. Watkins**

Senate Sponsor: David P. Hinkins

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**LONG TITLE**

**General Description:**

This bill addresses the treatment of electrical energy derived from certain methane gas as a renewable energy source under Title 10, Chapter 19, Municipal Electric Utility Carbon Emission Reduction Act, and Title 54, Chapter 17, Energy Resource Procurement Act.

**Highlighted Provisions:**

This bill:

► provides that electrical energy derived from methane gas from certain coal mine facilities is among the types of waste gases considered as a renewable energy source under Title 10, Chapter 19, Municipal Electric Utility Carbon Emission Reduction Act, and Title 54, Chapter 17, Energy Resource Procurement Act; and

► makes technical changes.

**Monies Appropriated in this Bill:**

None

**Other Special Clauses:**

None

**Utah Code Sections Affected:**

AMENDS:

**10-19-102**, as enacted by Laws of Utah 2008, Chapter 374

**54-17-601**, as enacted by Laws of Utah 2008, Chapter 374



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*Be it enacted by the Legislature of the state of Utah:*

Section 1. Section **10-19-102** is amended to read:

**10-19-102. Definitions.**

As used in this chapter:

(1) "Adjusted retail electric sales" means the total kilowatt-hours of retail electric sales of a municipal electric utility to customers in this state in a calendar year, reduced by:

(a) the amount of those kilowatt-hours attributable to electricity generated or purchased in that calendar year from qualifying zero carbon emissions generation and qualifying carbon sequestration generation;

(b) the amount of those kilowatt-hours attributable to electricity generated or purchased in that calendar year from generation located within the geographic boundary of the Western Electricity Coordinating Council that derives its energy from one or more of the following but that does not satisfy the definition of a renewable energy source or that otherwise has not been used to satisfy Subsection 10-19-201(1):

(i) wind energy;

(ii) solar photovoltaic and solar thermal energy;

(iii) wave, tidal, and ocean thermal energy;

(iv) except for combustion of wood that has been treated with chemical preservatives such as creosote, pentachlorophenol or chromated copper arsenate, biomass and biomass byproducts, including:

(A) organic waste;

(B) forest or rangeland woody debris from harvesting or thinning conducted to improve forest or rangeland ecological health and to reduce wildfire risk;

(C) agricultural residues;

(D) dedicated energy crops; and

(E) landfill gas or biogas produced from organic matter, wastewater, anaerobic digesters, or municipal solid waste;

(v) geothermal energy;

(vi) hydro-electric energy; or

(vii) waste gas and waste heat capture or recovery; and

59 (c) the number of kilowatt-hours attributable to reductions in retail sales in that  
60 calendar year from activities or programs promoting electric energy efficiency or conservation  
61 or more efficient management of electric energy load.

62 (2) "Amount of kilowatt-hours attributable to electricity generated or purchased in that  
63 calendar year from qualifying carbon sequestration generation," for qualifying carbon  
64 sequestration generation, means the kilowatt-hours supplied by a facility during the calendar  
65 year multiplied by the ratio of the amount of carbon dioxide captured from the facility and  
66 sequestered to the sum of the amount of carbon dioxide captured from the facility and  
67 sequestered plus the amount of carbon dioxide emitted from the facility during the same  
68 calendar year.

69 (3) "Banked renewable energy certificate" means a bundled or unbundled renewable  
70 energy certificate that is:

71 (a) not used in a calendar year to comply with this part or with a renewable energy  
72 program in another state; and

73 (b) carried forward into a subsequent year.

74 (4) "Bundled renewable energy certificate" means a renewable energy certificate for  
75 qualifying electricity that is acquired:

76 (a) by a municipal electric utility by a trade, purchase, or other transfer of electricity  
77 that includes the renewable energy attributes of, or certificate that is issued for, the electricity;  
78 or

79 (b) by a municipal electric utility by generating the electricity for which the renewable  
80 energy certificate is issued.

81 (5) "Commission" means the Public Service Commission.

82 (6) "Municipal electric utility" means any municipality that owns, operates, controls, or  
83 manages a facility that provides electric power for a retail customer, whether domestic,  
84 commercial, industrial, or otherwise.

85 (7) "Qualifying carbon sequestration generation" means a fossil-fueled generating  
86 facility located within the geographic boundary of the Western Electricity Coordinating  
87 Council that:

88 (a) becomes operational or is retrofitted on or after January 1, 2008; and

89 (b) reduces carbon dioxide emissions into the atmosphere through permanent

90 geological sequestration or through other verifiably permanent reductions in carbon dioxide  
91 emissions through the use of technology.

92 (8) "Qualifying electricity" means electricity generated on or after January 1, 1995  
93 from a renewable energy source if:

94 (a) (i) the renewable energy source is located within the geographic boundary of the  
95 Western Electricity Coordinating Council; or

96 (ii) the qualifying electricity is delivered to the transmission system of a municipal  
97 electric utility or a delivery point designated by the municipal electric utility for the purpose of  
98 subsequent delivery to the municipal electric utility; and

99 (b) the renewable energy attributes of the electricity are not traded, sold, transferred, or  
100 otherwise used to satisfy another state's renewable energy program.

101 (9) "Qualifying zero carbon emissions generation":

102 (a) means a generation facility located within the geographic boundary of the Western  
103 Electricity Coordinating Council that:

104 (i) becomes operational on or after January 1, 2008; and

105 (ii) does not produce carbon as a byproduct of the generation process;

106 (b) includes generation powered by nuclear fuel; and

107 (c) does not include renewable energy sources used to satisfy a target established under  
108 Section 10-19-201.

109 (10) "Renewable energy certificate" means a certificate issued in accordance with the  
110 requirements of Sections 10-19-202 and 54-17-603.

111 (11) "Renewable energy source" means:

112 (a) an electric generation facility or generation capability or upgrade that becomes  
113 operational on or after January 1, 1995 that derives its energy from one or more of the  
114 following:

115 (i) wind energy;

116 (ii) solar photovoltaic and solar thermal energy;

117 (iii) wave, tidal, and ocean thermal energy;

118 (iv) except for combustion of wood that has been treated with chemical preservatives  
119 such as creosote, pentachlorophenol or chromated copper arsenate, biomass and biomass  
120 byproducts, including:

- 121 (A) organic waste;
- 122 (B) forest or rangeland woody debris from harvesting or thinning conducted to improve  
123 forest or rangeland ecological health and to reduce wildfire risk;
- 124 (C) agricultural residues;
- 125 (D) dedicated energy crops; and
- 126 (E) landfill gas or biogas produced from organic matter, wastewater, anaerobic  
127 digesters, or municipal solid waste;
- 128 (v) geothermal energy located outside the state;
- 129 (vi) waste gas and waste heat capture or recovery~~[-or]~~ whether or not it is renewable,  
130 including methane gas from:
- 131 (A) an abandoned or working coal mine; or
- 132 (B) a coal degassing operation associated with a state-approved mine permit; or
- 133 (vii) efficiency upgrades to a hydroelectric facility, without regard to the date upon  
134 which the facility became operational, if the upgrades become operational on or after January  
135 1, 1995;
- 136 (b) any of the following:
- 137 (i) up to 50 average megawatts of electricity per year per municipal electric utility from  
138 a certified low-impact hydroelectric facility, without regard to the date upon which the facility  
139 becomes operational, if the facility is certified as a low-impact hydroelectric facility on or after  
140 January 1, 1995, by a national certification organization;
- 141 (ii) geothermal energy if located within the state, without regard to the date upon which  
142 the facility becomes operational; and
- 143 (iii) hydroelectric energy if located within the state, without regard to the date upon  
144 which the facility becomes operational;
- 145 (c) hydrogen gas derived from any source of energy described in Subsection (11)(a) or  
146 (b);
- 147 (d) if an electric generation facility employs multiple energy sources, that portion of the  
148 electricity generated that is attributable to energy sources described in Subsections (11)(a)  
149 through (c); and
- 150 (e) any of the following located in the state and owned by a user of energy:
- 151 (i) a demand side management measure, as defined by Subsection 54-7-12.8(1) with

152 the quantity of renewable energy certificates to which the user is entitled determined by the  
153 equivalent energy saved by the measure;

154 (ii) a solar thermal system that reduces the consumption of fossil fuels, with the  
155 quantity of renewable energy certificates to which the user is entitled determined by the  
156 equivalent kilowatt-hours saved, except to the extent the commission determines otherwise  
157 with respect to net-metered energy;

158 (iii) a solar photovoltaic system that reduces the consumption of fossil fuels with the  
159 quantity of renewable energy certificates to which the user is entitled determined by the total  
160 production of the system, except to the extent the commission determines otherwise with  
161 respect to net-metered energy;

162 (iv) a hydroelectric or geothermal facility, with the quantity of renewable energy  
163 certificates to which the user is entitled determined by the total production of the facility,  
164 except to the extent the commission determines otherwise with respect to net-metered energy;

165 (v) a waste gas or waste heat capture or recovery system other than from a combined  
166 cycle combustion turbine that does not use waste gas or waste heat, with the quantity of  
167 renewable energy certificates to which the user is entitled determined by the total production of  
168 the system, except to the extent the commission determines otherwise with respect to  
169 net-metered energy; and

170 (vi) the station use of solar thermal energy, solar photovoltaic energy, hydroelectric  
171 energy, geothermal energy, waste gas, or waste heat capture and recovery.

172 (12) "Unbundled renewable energy certificate" means a renewable energy certificate  
173 associated with:

174 (a) qualifying electricity that is acquired by a municipal electric utility or other person  
175 by trade, purchase, or other transfer without acquiring the electricity for which the certificate  
176 was issued; or

177 (b) activities listed in Subsection (11)(e).

178 Section 2. Section **54-17-601** is amended to read:

179 **54-17-601. Definitions.**

180 As used in this part:

181 (1) "Adjusted retail electric sales" means the total kilowatt-hours of retail electric sales  
182 of an electrical corporation to customers in this state in a calendar year, reduced by:

183 (a) the amount of those kilowatt-hours attributable to electricity generated or purchased  
184 in that calendar year from qualifying zero carbon emissions generation and qualifying carbon  
185 sequestration generation;

186 (b) the amount of those kilowatt-hours attributable to electricity generated or purchased  
187 in that calendar year from generation located within the geographic boundary of the Western  
188 Electricity Coordinating Council that derives its energy from one or more of the following but  
189 that does not satisfy the definition of a renewable energy source or that otherwise has not been  
190 used to satisfy Subsection 54-17-602(1):

191 (i) wind energy;

192 (ii) solar photovoltaic and solar thermal energy;

193 (iii) wave, tidal, and ocean thermal energy;

194 (iv) except for combustion of wood that has been treated with chemical preservatives  
195 such as creosote, pentachlorophenol or chromated copper arsenate, biomass and biomass  
196 byproducts, including:

197 (A) organic waste;

198 (B) forest or rangeland woody debris from harvesting or thinning conducted to improve  
199 forest or rangeland ecological health and to reduce wildfire risk;

200 (C) agricultural residues;

201 (D) dedicated energy crops; and

202 (E) landfill gas or biogas produced from organic matter, wastewater, anaerobic  
203 digesters, or municipal solid waste;

204 (v) geothermal energy;

205 (vi) hydroelectric energy; or

206 (vii) waste gas and waste heat capture or recovery; and

207 (c) the number of kilowatt-hours attributable to reductions in retail sales in that  
208 calendar year from demand side management as defined in Section 54-7-12.8, with the  
209 kilowatt-hours for an electrical corporation whose rates are regulated by the commission and  
210 adjusted by the commission to exclude kilowatt-hours for which a renewable energy certificate  
211 is issued under Subsection 54-17-603(4)(b).

212 (2) "Amount of kilowatt-hours attributable to electricity generated or purchased in that  
213 calendar year from qualifying carbon sequestration generation," for qualifying carbon

214 sequestration generation, means the kilowatt-hours supplied by a facility during the calendar  
215 year multiplied by the ratio of the amount of carbon dioxide captured from the facility and  
216 sequestered to the sum of the amount of carbon dioxide captured from the facility and  
217 sequestered plus the amount of carbon dioxide emitted from the facility during the same  
218 calendar year.

219 (3) "Banked renewable energy certificate" means a bundled or unbundled renewable  
220 energy certificate that is:

221 (a) not used in a calendar year to comply with this part or with a renewable energy  
222 program in another state; and

223 (b) carried forward into a subsequent year.

224 (4) "Bundled renewable energy certificate" means a renewable energy certificate for  
225 qualifying electricity that is acquired:

226 (a) by an electrical corporation by a trade, purchase, or other transfer of electricity that  
227 includes the renewable energy attributes of, or certificate that is issued for, the electricity; or

228 (b) by an electrical corporation by generating the electricity for which the renewable  
229 energy certificate is issued.

230 (5) "Electrical corporation":

231 (a) is as defined in Section 54-2-1; and

232 (b) does not include a person generating electricity that is not for sale to the public.

233 (6) "Qualifying carbon sequestration generation" means a fossil-fueled generating  
234 facility located within the geographic boundary of the Western Electricity Coordinating  
235 Council that:

236 (a) becomes operational or is retrofitted on or after January 1, 2008; and

237 (b) reduces carbon dioxide emissions into the atmosphere through permanent  
238 geological sequestration or through another verifiably permanent reduction in carbon dioxide  
239 emissions through the use of technology.

240 (7) "Qualifying electricity" means electricity generated on or after January 1, 1995  
241 from a renewable energy source if:

242 (a) (i) the renewable energy source is located within the geographic boundary of the  
243 Western Electricity Coordinating Council; or

244 (ii) the qualifying electricity is delivered to the transmission system of an electrical



245 corporation or a delivery point designated by the electrical corporation for the purpose of  
246 subsequent delivery to the electrical corporation; and

247 (b) the renewable energy attributes of the electricity are not traded, sold, transferred, or  
248 otherwise used to satisfy another state's renewable energy program.

249 (8) "Qualifying zero carbon emissions generation":

250 (a) means a generation facility located within the geographic boundary of the Western  
251 Electricity Coordinating Council that:

252 (i) becomes operational on or after January 1, 2008; and

253 (ii) does not produce carbon as a byproduct of the generation process;

254 (b) includes generation powered by nuclear fuel; and

255 (c) does not include renewable energy sources used to satisfy the requirement  
256 established under Subsection 54-17-602(1).

257 (9) "Renewable energy certificate" means a certificate issued under Section 54-17-603.

258 (10) "Renewable energy source" means:

259 (a) an electric generation facility or generation capability or upgrade that becomes  
260 operational on or after January 1, 1995 that derives its energy from one or more of the  
261 following:

262 (i) wind energy;

263 (ii) solar photovoltaic and solar thermal energy;

264 (iii) wave, tidal, and ocean thermal energy;

265 (iv) except for combustion of wood that has been treated with chemical preservatives  
266 such as creosote, pentachlorophenol or chromated copper arsenate, biomass and biomass  
267 byproducts, including:

268 (A) organic waste;

269 (B) forest or rangeland woody debris from harvesting or thinning conducted to improve  
270 forest or rangeland ecological health and to reduce wildfire risk;

271 (C) agricultural residues;

272 (D) dedicated energy crops; and

273 (E) landfill gas or biogas produced from organic matter, wastewater, anaerobic  
274 digesters, or municipal solid waste;

275 (v) geothermal energy located outside the state;

276 (vi) waste gas and waste heat capture or recovery[~~;~~~~or~~] whether or not it is renewable,  
277 including methane gas from:

278 (A) an abandoned or working coal mine; or

279 (B) a coal degassing operation associated with a state-approved mine permit; or

280 (vii) efficiency upgrades to a hydroelectric facility, without regard to the date upon  
281 which the facility became operational, if the upgrades become operational on or after January  
282 1, 1995;

283 (b) any of the following:

284 (i) up to 50 average megawatts of electricity per year per electrical corporation from a  
285 certified low-impact hydroelectric facility, without regard to the date upon which the facility  
286 becomes operational, if the facility is certified as a low-impact hydroelectric facility on or after  
287 January 1, 1995, by a national certification organization;

288 (ii) geothermal energy if located within the state, without regard to the date upon which  
289 the facility becomes operational; or

290 (iii) hydroelectric energy if located within the state, without regard to the date upon  
291 which the facility becomes operational;

292 (c) hydrogen gas derived from any source of energy described in Subsection (10)(a) or  
293 (b);

294 (d) if an electric generation facility employs multiple energy sources, that portion of the  
295 electricity generated that is attributable to energy sources described in Subsections (10)(a)  
296 through (c); and

297 (e) any of the following located in the state and owned by a user of energy:

298 (i) a demand side management measure, as defined by Subsection 54-7-12.8(1), with  
299 the quantity of renewable energy certificates to which the user is entitled determined by the  
300 equivalent energy saved by the measure;

301 (ii) a solar thermal system that reduces the consumption of fossil fuels, with the  
302 quantity of renewable energy certificates to which the user is entitled determined by the  
303 equivalent kilowatt-hours saved, except to the extent the commission determines otherwise  
304 with respect to net-metered energy;

305 (iii) a solar photovoltaic system that reduces the consumption of fossil fuels with the  
306 quantity of renewable energy certificates to which the user is entitled determined by the total

307 production of the system, except to the extent the commission determines otherwise with  
308 respect to net-metered energy;

309 (iv) a hydroelectric or geothermal facility with the quantity of renewable energy  
310 certificates to which the user is entitled determined by the total production of the facility,  
311 except to the extent the commission determines otherwise with respect to net-metered energy;

312 (v) a waste gas or waste heat capture or recovery system, other than from a combined  
313 cycle combustion turbine that does not use waste gas or waste heat, with the quantity of  
314 renewable energy certificates to which the user is entitled determined by the total production of  
315 the system, except to the extent the commission determines otherwise with respect to  
316 net-metered energy; and

317 (vi) the station use of solar thermal energy, solar photovoltaic energy, hydroelectric  
318 energy, geothermal energy, waste gas, or waste heat capture and recovery.

319 (11) "Unbundled renewable energy certificate" means a renewable energy certificate  
320 associated with:

321 (a) qualifying electricity that is acquired by an electrical corporation or other person by  
322 trade, purchase, or other transfer without acquiring the electricity for which the certificate was  
323 issued; or

324 (b) activities listed in Subsection (10)(e).

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**Legislative Review Note**  
as of 1-19-10 1:47 PM

**Office of Legislative Research and General Counsel**

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**H.B. 192 - Renewable Energy - Methane Gas**

**Fiscal Note**

2010 General Session

State of Utah

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**State Impact**

Enactment of this bill will not require additional appropriations.

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**Individual, Business and/or Local Impact**

Enactment of this bill likely will not result in direct, measurable costs and/or benefits for individuals, businesses, or local governments.

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