

(8) The shut-in reservoir pressures (average) and cumulative gas-in-place (including native gas) at the beginning of each injection and withdrawal season for the last 10 years; and

(9) A detailed analysis, including data and work papers, to support the need for additional facilities (wells, gathering lines, headers, compression, dehydration, or other appurtenant facilities) for the modification of working gas/cushion gas ratio and/or to improve the capability of the storage field.

[Order 686, 71 FR 63693, Oct. 31, 2006, as amended by Order 686-A, 72 FR 37436, July 10, 2007]

§ 157.214 Increase in storage capacity.

(a) *Prior notice.* Subject to the notice requirements of §157.205, the certificate holder is authorized to increase the maximum volume of natural gas authorized to be stored in a storage field to the extent that geological data and operating experience have demonstrated that a volume of natural gas greater than that currently certificated may be safely stored without the construction of additional facilities.

(b) *Contents of request.* In addition to the requirements of §157.205(b), requests filed for activities described in paragraph (a) shall contain:

(1) Current and requested maximum storage capacity;

(2) Current and requested maximum storage pressure;

(3) Average depth of the storage formation;

(4) Copies of any geological or engineering studies that demonstrate the feasibility of the increase in storage volume; and

(5) A statement setting forth the purpose of the proposed increased capacity.

(c) *Reporting requirements.* For any storage facility whose capacity is increased pursuant to this section, the certificate holder shall submit, in the manner prescribed in §385.2011 of this chapter, semi-annual reports (to coincide with the termination of the injection and withdrawal cycles) containing the information listed in subdivisions (1) through (8) of this paragraph. The certificate holder shall continue to file semi-annual reports until the storage

inventory volume has reached, or closely approximates, the maximum specified in the request. Thereafter, the reports shall continue on a semi-annual basis for a period of one year. The filing of reports shall be discontinued thereafter unless otherwise ordered by the Commission. (Volumes shall be stated at 14.73 psia and 60° F, and pressures shall be stated in psia.)

(1) The daily volume of natural gas injected into and withdrawn from the storage reservoir.

(2) The volume of natural gas in the reservoir at the end of the reporting period.

(3) The maximum daily injection or withdrawal rate experienced during the reporting period and the average working pressure on such maximum days taken at a central measuring point where the total volume injected or withdrawn is measured.

(4) Results of any tracer program by which the leakage of injected gas may be determined. If the leakage of gas exists, the report should show the estimated total volume of gas leakage, the volume of recycled gas and the remaining inventory of gas in the reservoir at the end of the reporting period.

(5) Any surveys of pressures in gas wells, water levels in observation wells, pump test results for the aquifer-type reservoirs, and the results of back-pressure tests conducted during the reporting period.

(6) The latest revised structure and isopachous contour maps showing the location of the wells, the location and extent of the gas bubble in the storage reservoir for aquifer-type reservoirs and in any other reservoirs of the project in which gas bubbles are known to exist. This map need not be filed if there is no material change from the map previously filed.

(7) Discussion of current operating problems and conclusions.

(8) Such other data or reports which may aid the Commission in the evaluation of the storage project.

[Order 234, 47 FR 24266, June 4, 1982, as amended by Order 493, 53 FR 15030, Apr. 27, 1988]