SUMMARY

Expert Report on the PennEast Pipeline Project Economic Impact Analysis for New Jersey and Pennsylvania

Presented to the New Jersey Conservation Foundation by Ian Goodman & Brigid Rowan November 4, 2015







In their expert report, The Goodman Group, Ltd. (TGG) evaluates the economic impact study (PennEast Pipeline Project Economic Impact Analysis, referred to in this study as the PennEast Analysis) prepared for the PennEast Pipeline Company and co-authored by Econsult Solutions, Inc. and Drexel University School of Economics. TGG's evaluation demonstrates that the PennEast Analysis significantly overstates the Total Jobs (which PennEast estimated at 12,160) from designing and building the pipeline. Specifically, TGG concludes that the PennEast Analysis has overstated these Total Jobs by approximately two thirds or more.

Furthermore, it should be noted that these jobs are very short-term in nature. Actual construction would occur over a one-year period (late 2016-late 2017) with activity and jobs concentrated into only six months (early January-early July 2017). Most of the employment impacts (total onsite and offsite jobs) would take place during the same period. Direct Onsite Construction jobs have an average duration of 5.2 months. And half or more of Direct Onsite Construction labor for PennEast would be non-local (residing outside NJ and PA).

TGG's review of employment impact studies for other comparable gas pipelines in the Northeast US shows that the PennEast Analysis multiplier (10.7 jobs per \$1 million project cost for all workers) is an outlier with respect to comparable pipelines. Specifically, the multipliers for other similar gas pipelines are only 8-36% of the PennEast Analysis multiplier. TGG therefore concludes that the PennEast Analysis has significantly overstated the Total Jobs numbers (by approximately two thirds or more) based on:

- our review of employment impact studies for other comparable gas pipelines in the Northeast US;
- our evaluation of the PennEast Analysis job estimates and the internal inconsistencies in the PennEast Analysis; and
- our review and extensive experience with best practices in employment impact studies, notably for pipelines and other energy projects.

Direct Onsite Construction Jobs



50% OR MORE of actual construction jobs go to out-of-state workers

TOTAL ACTUAL CONSTRUCTION JOBS

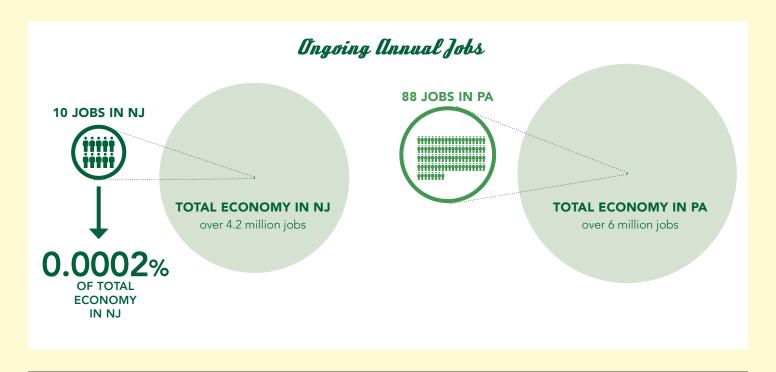
OUT-OF-STATE WORKERS RESIDING OUTSIDE NJ AND PA > IN-STATE
WORKERS

RESIDING IN NJ AND PA "TGG's evaluation demonstrates that the PennEast Analysis significantly overstates the Total Jobs (which PennEast estimated at 12,160) from designing and building the pipeline. Specifically, TGG concludes that the PennEast Analysis has overstated these Total Jobs by approximately two thirds or more."

The TGG Report also evaluates employment impacts from ongoing activities to operate and maintain the pipeline and related facilities. According to the PennEast Analysis, annual jobs from operations (including spinoffs) are 98 in total with 88 in Pennsylvania and 10 in New Jersey. TGG concludes that even using the PennEast estimates, pipeline operations result in very small expenditures (and employment impacts) and have very little positive impact on the economy, especially in New Jersey. But as low as they are, the PennEast estimates of annual jobs from operations may still be overstated. Other pipeline studies (notably for comparable Northeast US gas pipelines reviewed by TGG) estimate substantially lower job impacts from operations.

Finally, TGG also finds that even if the PennEast Analysis' employment impact estimates were realistic:

- the employment impacts from the design and construction of the Project are
 - (a) tiny in the context of the New Jersey and Pennsylvania state economies (less than 0.1% of total New Jersey jobs); and
 - (b) very short-term (mainly from actual construction and related spin-offs which occur over a one year period (mostly in 2017), but are concentrated into only six months);
- the employment impacts from ongoing activities to operate and maintain the pipeline are infinitesimally small, especially in the context of the New Jersey economy (10 jobs or about 0.0002% of total state jobs).







Media Contact:

Tom Gilbert, Campaign Director—Energy, Climate and Natural Resources New Jersey Conservation Foundation tom@njconservation.org 908-234-1225, x305