# An Estimate of the Jobs Impact of

# Senate Bill 696

Thomas Tanton

Principal

$T^2$ & Associates

# Introduction

Thomas Tanton, Principal of $T^2$ & Associates, has undertaken a preliminary analysis of the jobs impact of Senate Bill 696.

This preliminary Report provides my analysis of three critical aspects based on current and available information on the projects, currently stalled, with respect to:

1. Direct employment opportunities created by adoption and implementation

2. Indirect employment opportunities

3. Induced employment

The findings and conclusions presented in this report are based on the best available information and data to date. To the extent that project specific data for projects that may be enabled by SB696 were not provided, the results presented here should be viewed as indicative and not predictive.

The analysis, findings and conclusions contained herein are true and complete to the best of my knowledge and belief, and based upon my professional experience.

## Summary

We have estimated the direct, indirect and induced employment[1] that would likely result from passage and implementation of Senate Bill 697 (Wright) to be

⟶ Direct Employment: 25,000-35,000

⟶ Indirect Employment:12,360-18,150

⟶ Induced Employment:9,100-12,000

Direct employment is measured in full-time equivalents for an average of three years (assumed average construction period for projects) while the other jobs are considered persistent. These estimates are based on the provided estimate that projects within the South Coast AQMD, otherwise eligible for emission credits from the District ERC bank, would have to spend, in aggregate, approximately $4 Billion, to purchase those ERC from other (private) permit holders at market prices.

## Background

Due to a state court CEQA decision, the South Coast District has, since November 3, 2008, been unable to issue any permits to facilities that rely on the District's internal bank to offset their emissions as required by the Clean Air Act. The District has over a thousand permits at about 500 facilities currently on hold. In addition, the court decision required the District to set aside approximately 3,000 permits that had already been issued pending decision(s) on the litigation.

The affected facilities include essential public services, such as sewage treatment plants, hospitals, schools, and landfill gas renewable energy facilities. In addition, affected facilities include those that are exempt from the requirement to provide private ERC, where the District's internal bank provides the needed offsets. These include equipment replacements, air pollution control projects, relocations of existing equipment, and emergency backup engines. Also, small facilities emitting less than 4 tons per year of a given pollutant can no longer get permits. There will likely be over a thousand additional permits that will not be able to be issued, or may not even be submitted to the District, if the District has to wait another year before issuing any permits.

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[1] *Direct employment* is defined as those people employed by the various projects and includes jobs during construction and during operation of the project.
*Indirect Employment* is defined as jobs created or necessary to provide materials or support to projects during construction and during operation
*Induced employment* is defined as jobs created by the subsequent expenditure of earnings by workers in either of the first two categories.

If a facility buys ERC on the private market, it can still get a permit, but these credits are expensive and in limited supply. Examples of the estimated costs to obtain credits on the open market include the following: Police station (emergency backup generator), $77,000;Gas station ($234,000); Auto body shop (spray booth) $435,000; Food manufacturer (tortilla chip fryer and oven) $1.6 million; Sewage treatment plant (expansion with new digester and flare) $2,4 million; landfill (landfill gas renewable energy project with five turbines) $115 million.

Urgency legislation has been introduced (SB696) to overturn the effect of the Court's order by providing an exemption from CEQA for District rules creating, tracking, or providing credits from the District's internal bank, in order to end the permit moratorium, and reverse the holding requiring the District to set aside thousands of already-issued permits. The proposed legislation would provide the exemption only if discretionary projects using the credits were subject to CEQA, or covered by an existing exemption. Also, the legislation requires the District's rules to provide stringent requirements to limit emissions of criteria and toxic air pollutants, and requires the District to account for the use of these credits in its air quality plan, and demonstrate that such use will not interfere with attainment of the air quality standards.

Under the Federal Clean Air Act, state and local air pollution agencies are required to adopt programs that assure that major new and modified sources of nonattainment air pollutants are required to obtain permits, meet emission standards that constitute the lowest achievable emission rates, and provide offsets for their emission increases. Offsets are equivalent emission reductions from other sources that have shut down or over controlled their emissions beyond applicable legal requirements. The offset requirement may be met programmatically, on an aggregate basis.

In the South Coast District, sources that are not exempt from offsets and do not obtain credits from the District's "Priority Reserve", but are subject to offset requirements, must submit "Emission Reduction Credits" (ERCs) to the District in order to get a permit to construct. ERCs are created when a source either shuts down or over controls, and applies to the District to obtain an ERC. The District validates the emissions reductions, applies the applicable rule calculation methodologies, and issues the credit. The person who created the ERC can now sell it on the open market to sources that need to provide offsets to get a permit. As a practical matter, most ERCs are created from shutdown of facilities.

In some cases, a facility shuts down and lets its permit expire without applying to the District for an ERC. In such cases, the District waits until it is too late to apply for an ERC, or to reinstate the permit, under District rules, and then claims the shutdown reduction for the District's "internal bank." These are referred to as "orphan shutdowns." The internal bank also takes credit for certain other sources

of surplus credit, such as payback of offsets previously provided, but orphan shutdowns constitute the bulk of the credits deposited in the internal bank.

The credits in the internal bank are used to offset emissions from sources using the "Priority Reserve" (mostly essential public services such as sewage treatment plants, hospitals, schools, landfills, etc.) They are also used to offset emissions from new and modified facilities that are exempt from offsets under District rules but not exempt under federal or state law. Examples include facilities that implement air pollution control strategies that reduce one pollutant (such as volatile organic compounds or VOCs) with an afterburner, but where the control strategy increases a collateral pollutant, e.g. nitrogen oxides or NOx. Other exempt sources are facilities under 4 tons per year of a given pollutant, emergency equipment including emergency backup engines, relocations of existing equipment, and equipment replacements with no increase in maximum rating. Annually, the District provides an accounting showing the new credits deposited in the bank as well as the debits (credits used to offset new or modified source emissions).

## Description Of Modeling, Analysis and Assumptions

The economic impacts from any project development can be significant to the region in which the project is located. The benefits that are generated by the expenditures, both during the construction and the operations phases depend on the extent to which those expenditures are spent locally, as well as the structure of the local and state economy.

The model used for this analysis is a simple spreadsheet and differs from models often used to determine "economic impacts" of various regulations or legislation. Those analyses often use "computable general equilibrium" or input/output models. Such models are not appropriate for determining the project specific level of employment in this instance because there is a population of specific projects. The spreadsheet calculates direct, indirect, and induced economic impacts for the construction and operating periods of any size or type project, and throughout a typical 20- to 30-year life of a project.

California specific multipliers and personal expenditure patterns were used to derive the results. We do not have multipliers (monetary velocity) to differentiate the South Coast area from California as a whole. All dollar figures are in 2009 dollars.

Different types of projects (e.g. fire stations, water treatment facilities, schools, etc.) have different types of expenditure patterns and explain the range of estimates for each class of employment. Rather than assume a mix or projects we ran the spreadsheet for various types of projects scaled to $4 Billion in costs. The model accounts for different jobs to equipment/materials ratios of different types of projects.

Employment estimates assume that the approximately $4 Billion otherwise paid for ERCs, would be spent directly on stalled projects, and not saved or used to offset other revenue requirements. Such actions would reduce but not eliminate, jobs created. The employment estimates further assume that money paid for ERCs to private holders of those ERCs would not be spent within District boundaries.

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