B. With respect to any submission that impacts the amount of premium charged to the producer, the applicant must provide with the submission:

(2) A list of the assumptions used in the formulation of the premiums or rates of premium.

COP Insurance Rating Model's List of Assumptions
County Producer Distributions

1. Assume that within each of the five segments of the NASS producer distributions a truncated[1] normal distribution exists. This enables the mean and standard deviation of each producer group to be utilized to generate an implied set of producer yields for the county. This implied set of yields behaves as an empirical distribution, allowing the data to suggest the true distribution of producers in the county. An example of the distribution statistics provide by NASS is displayed in Figure 13 along with the distribution generated in Figure 14.

Cotton Harvested by Yield Size (same farm COUNT in each group) CA:Kern-06029 (1997 Census of Agriculture)									
Producer Grouping	**# Farms**	**Cotton Acreage**				**Total Bales Harvested**	**Yield**		
		Acreage	**% of Total**	**Mean Acres**	**Stdev Ac/Fa.**		**Gross Yield**	**Mean**	**StDev**
Smallest 20%	74	26,027	9.8	352	447	44,645	1.71	1.63	0.38
20% to 40%	74	71,513	26.9	966	2736	150,675	2.1	2.1	0.09
40% to 60%	74	49,776	18.8	673	666	117,788	2.36	2.39	0.09
60% to 80%	74	55,896	21.1	755	662	144,234	2.58	2.6	0.08
80% to 100%	74	62,250	23.4	841	2710	185,014	2.97	3.1	0.48
All Farms	370	265,462	100	717	1781	642,356	2.41	2.36	0.57

Figure 13

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[1] The lower tail of the normal distribution was truncated to prevent it from suggesting a negative acreage or yield value for producer within the county.
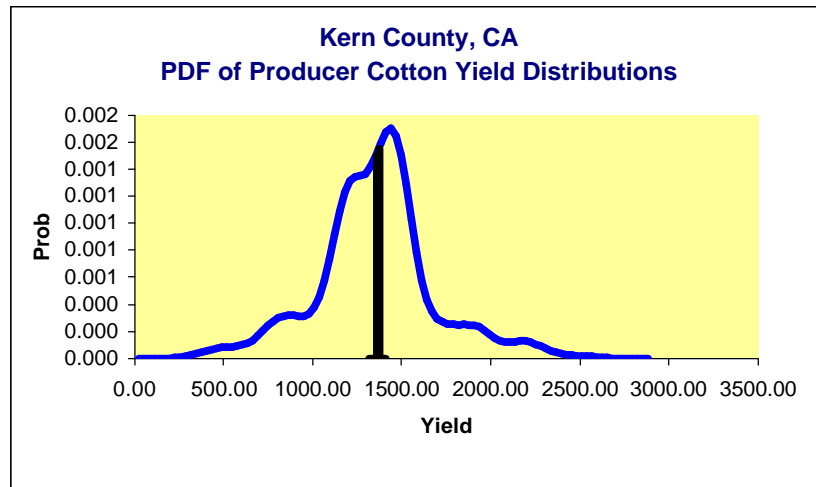
Kern County, CA
PDF of Producer Cotton Yield Distributions

Figure 14

2. For producer yield generation, assume producer's acreage is a constant percentage of the county throughout his production history. For example producer #1 has 5% of the county's total acreage for all years of experience.

3. Producer's percentage of planted acreage, which is harvested, is equivalent to the county's average for the particular year. For example, if the county harvest 98% of the acreage planted for 2000 then the assumption is that all producers will harvest 98% of their planted acreage in 2000.

Producer Participation

4. Assume as discussed in Appendix E that the central portion of producers within the county yield distribution will participate in the Cost of Production (COP) insurance program. This is despite projections the upper portion of the distribution will actually participate in the program. The belief that the higher yielding producers will participate is due to the individualized rating process, which customizes producer's rates to their historical performance. This

assumption may cause the base rate to be more expensive than the actual risk
dictates. However, given the uncertainty and unavailability of individual
producer data surrounding this project, AgriLogic felt that conservative estimates
were a better choice at this time. This allows the additional parameter risk
inherent in this type of process to be offset by slightly over estimating risk.
Therefore, the entire distribution was utilized in the estimation of rates, which is
as if the central portion of the distribution is participating.

Quality Load Factor

5. Assume the delivery of the entire cotton crop meeting the standard acceptable
   quality level (color 41, leaf 4, staple 34, mike 35-36 and 43-49, strength 23.5-
   25.4) would not have a significant impact on the world cotton market. This
   assumption is necessary to quantify the value lost due to quality concerns on
   annual basis. A more in-depth discussion of the assumption may be referenced on
   page 36 of the rating paper.

General Rating

6. All historical deviations in yield from trend are being considered as if they occur
   for the upcoming year. Given this assumption those historical deviations from
   trend are evaluated under current farm policy and market conditions. The
   evaluation entails attaching a price under current market conditions to the
   historical deviations. The result of the evaluation derives the rates for the
   upcoming year.

7. Given the assumption that all historical deviations in yield from trend are being
   evaluated for the upcoming year, the applicable APH is the average of the actual

yields, with appropriate substitutions of 60% of the county T-yield, for the 1992

to 2001 period.