

- baghouse can be designed using a 6.0 air-to-cloth (AC) ratio, which allows for a reduced footprint compared to a 4.0 AC ratio sized to handle the entire unit fly ash loading
- There is not adequate space available adjacent to the existing ESP casings for placement of a baghouse. Therefore, long tie-in ductwork will be required to route flue gas to an open area where the baghouse can be constructed. As such, the reduced size of the polishing baghouse is not anticipated to provide significant enough cost savings when compared to a baghouse that utilizes a 4.0 AC ratio.
- Baghouse (Primary PM Collection):
 - The existing ESP would be abandoned in place (could be demolished at a later date). As mentioned previously, long tie-in ductwork will be required to route flue gas to an open area where the baghouse can be constructed while the unit continues to operate in order to minimize the tie-in outage duration.

A baghouse is expected to have a pressure drop of 8 in. w.c., but could be higher depending on the location of the baghouse in relation to the tie-in to the existing flue gas path. The current axial fans are already operated very close to their stall curve, and do not have any pressure drop operating margin. Therefore, either replacement of the existing ID fans or installation of new booster fans would be required to accommodate the additional pressure drop through the baghouse.

2.3. PARTICULATE EMISSIONS SUMMARY

Table 2-1 below provides a summary of the postupgrade achievable emission rate for the feasible PM control option evaluated to achieve a proposed PM emission limit of 0.010 lb/MMBtu. The estimated emission rates included in the following tables are considered to be representative of an average emission rate that could be achieved under normal operating conditions. The emission rates provided **should not be** construed to represent an enforceable regulatory or proposed permit limit. Corresponding regulatory and/or permit limits must be evaluated on a control system-specific basis taking into consideration normal operating variability (i.e., a minimum additional 20% margin would likely be needed to account for operating margin).

Table 2-1 — Unit 2 PM Emissions Summary

Parameter	Control Efficiency ^{Note 1}	Projected Emissions ^{Note 2} (lb/MMBtu)	Expected Emissions (ton/year)
Baseline (Dry ESP)	--	0.015	254
ESP Rebuild	46.7%	0.008	135

Note 1 – Control efficiency is based on incremental improvement achieved with the option in addition to baseline dry ESP operation (e.g. not to be misconstrued as a total percent removal from uncontrolled PM emissions).

Note 2 – No compliance margin is included in these estimates. The emissions rate projections should not be used as an achievable limit for these upgrades.

2.4. TIMELINE FOR INSTALLATION

A high-level implementation schedule that outlines the time needed for the project steps necessary for the implementation of the feasible control options are summarized below. It should be noted that although a baghouse is not considered to be economically feasible, the control option is included in the summary below for reference on the expected timeline required for implementation of this control option. Other project-related