Key Problem Heart Register Setup

Air Register Setup Philosophy (In-service vs O/S operation)

[O/S vs I/S]

It is felt that alot of the overheat problems stem from the original B&W register setup philosophy.

Setup to Balance air flow (with O_2 grids - AGABS) [I/S high flow]
push air from middle to outsides

however when burner row (re pulv) taken O/S
for up to 2 weeks for pulv major overhaul

these conditions allow overheat to center burners
started for combustion air flow

O/S low flow

one possible solution was to provide 2 position register settings for I/S and O/S. However must ensure 100% reliability of register mobility. Typical, good reliability was if 90% functioned properly however unacceptable for automated control

~~It was~~ The alternative pursued was independent air flow
~~The other~~ balancing (balanced irregardless I/S or O/S)
Dedicated register ~~setup~~ ~~other~~ alignment

too large a burner?