Select AGC lit review items:

Paper link: <https://ieeexplore.ieee.org/document/7069640>

Summary: Uses real-time simulation (RTDS) and PMU data to show how an area may modify another areas AGC based on variable solar generation to allow for smart market power purchase agreements.

Relevance: AGC response to variable solar resources. Uses real data. Shows oscillations that may be caused by cloud cover and introduces the idea of one area controlling another area’s AGC.

Paper link: <https://www.nerc.com/docs/oc/rs/NERC%20Balancing%20and%20Frequency%20Control%20040520111.pdf>

Summary: Introduction to many basic concepts involved with balancing and frequency control as presented by NERC in 2011.

Relevance: Covers the idea of AGC being used to manage ACE. Provides some (now outdated) mandatory standards that should be considered when tuning AGC control. Newest standards vary by interconnection, but are on the NERC website under the BAAL designation.

Paper link: <https://ieeexplore.ieee.org/document/4073107>

Summary: Semi-Historical document introducing the Error Adaptive Control Computer (EACC) for AGC. The EACC was/is a basic logic device that manipulated AGC ACE signals based on simple logic, thresholds, and timers.

Relevance: Presents common AGC equations and the beginnings of more advanced AGC routines. Often cited in AGC papers dealing with more advanced control.

Paper link: <https://ieeexplore.ieee.org/document/14588>

Summary: Introduces variable frequency bias as applied to AGC.

Relevance: Provides information about variable frequency bias as applied to AGC to better respond to events. Mentions how AGC should only respond to internal area events to prevent over action.

Paper link: <https://www.semanticscholar.org/paper/An-Overview-of-AGC-Strategies-in-Power-System-Hasan/8ef40fa247656c25a963f29c40d1f0687f029d29>

Summary: Overview of AGC strategies in power systems.

Relevance: Provides many references and brief explanations of AGC control strategies up to 2012.