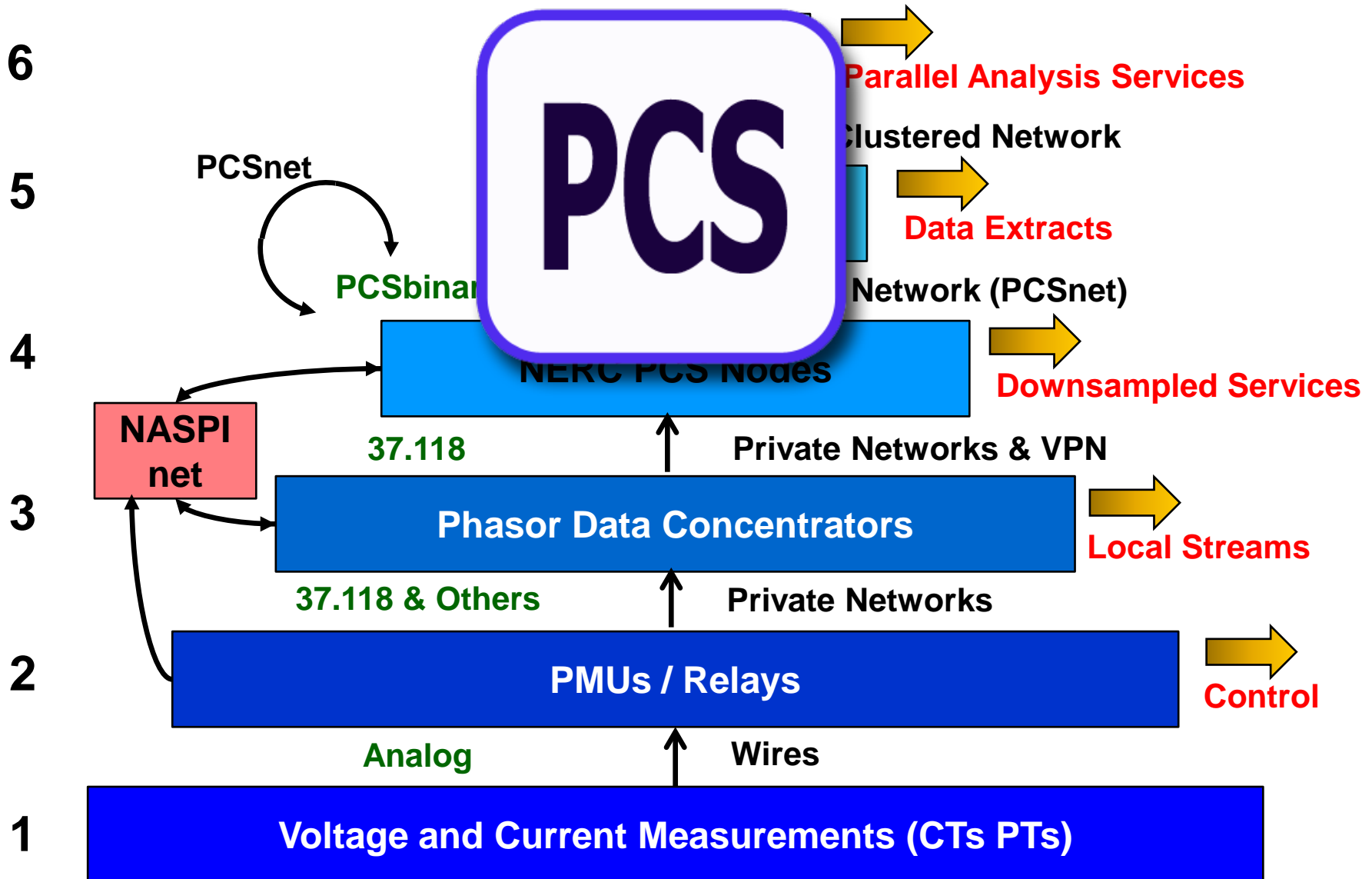


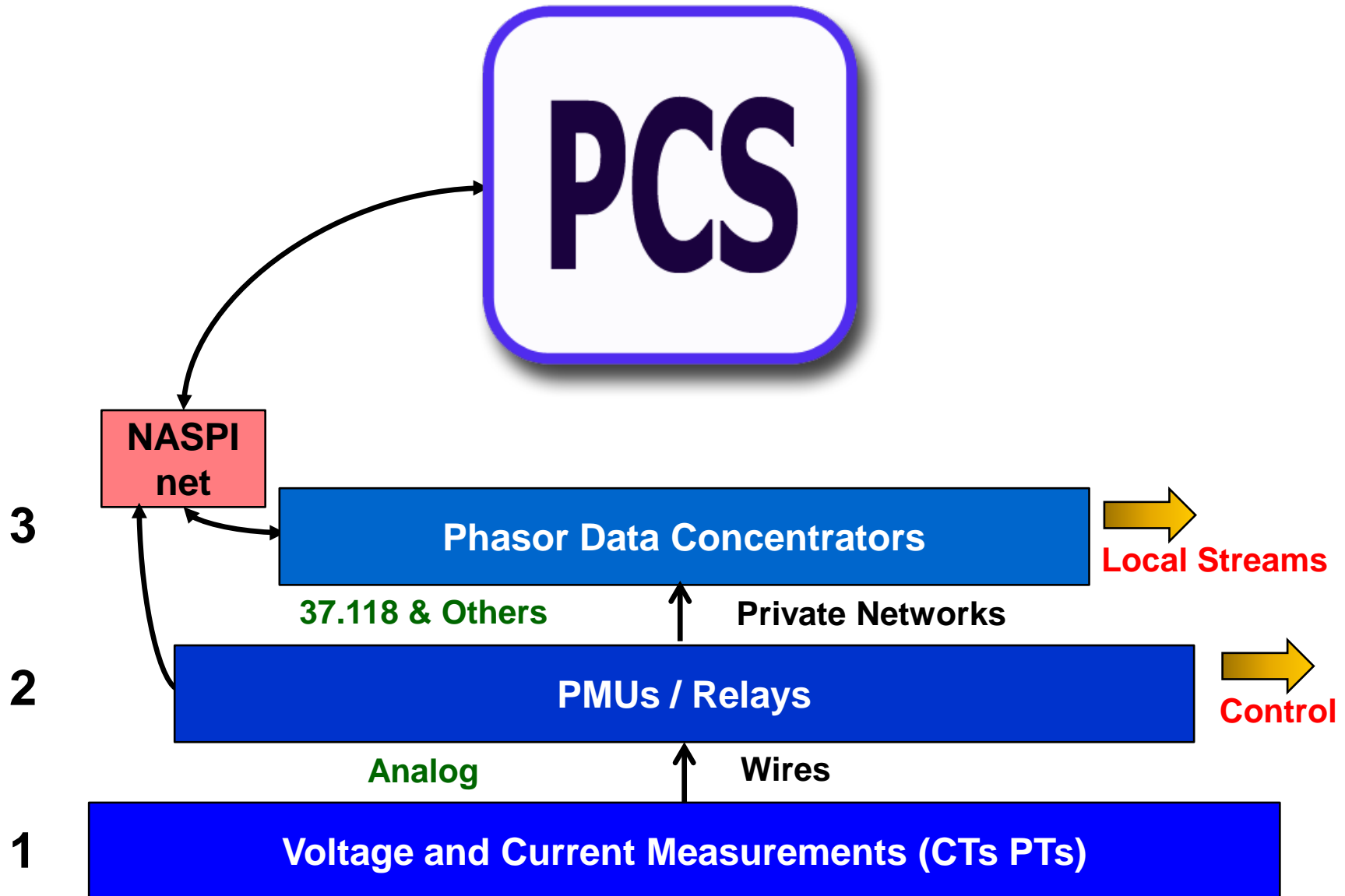
NERC Phasor Concentration System Project Status

**NASPI Workgroup Meeting
June 3th, 2009**

Russell Robertson







2009 PCS Workplan

- **March** – NERC/TVA contract signed.
- **April** – System requirements final draft released.
- **May** – System development begins.

- **June** – Process starts to select “beta test” locations in EI. Process starts to establish communication contracts for networks between beta sites and TVA.
- **August** – PCS technical specifications for 3rd party tool integration released. NERC selects beta test hosts. Approach finalized for central archive and fast data analysis system (Hadoop). PCS requirements document approved by NERC.
- **September** – Contracts for network connection among PCS beta sites and TVA established (beginnings of PCSnet). Requirements finalized and agreement established for PCS security assessment.
- **October** – Contracts signed with “beta test” hosts.
- **December** – Beta PCS systems deployed at initial PCS test site.

Proposed 2010 PCS Milestones

- **January** – PCS locations for 2010 selected
(2 sites beyond the 3 beta locations)
- **April** – Deployment of beta system for the test cluster
(three sites)
- **June** – PCS system design completed – Release 1.0.
Existing three EI PCS beta nodes upgraded to
production software – NERC PCS officially comes
online.
- **September** – PCS deployment to 4th site.
- **November** – PCS deployment to 5th site

TVA Operational Update

- **There are 108 established PMU connections at TVA.**
 - New: 2 from OG&E, 2 from NYPA
 - Upcoming: 6 from Duke, 4 from Dominion
- **An estimated 1.5 trillion unique points of measured data consuming 15TB of disk space have been collected since 2005.**
- **All NYPA PMU's are now reporting at 30 samples per second**
- **PJM plans to bring a TVA PDC (Gen 1) into production service in mid-June.**
- **SCE is installing TVA PDC (Gen 1) for testing in their phasor center.**
- **MISO and BPA have expressed interest in testing a TVA PDC.**