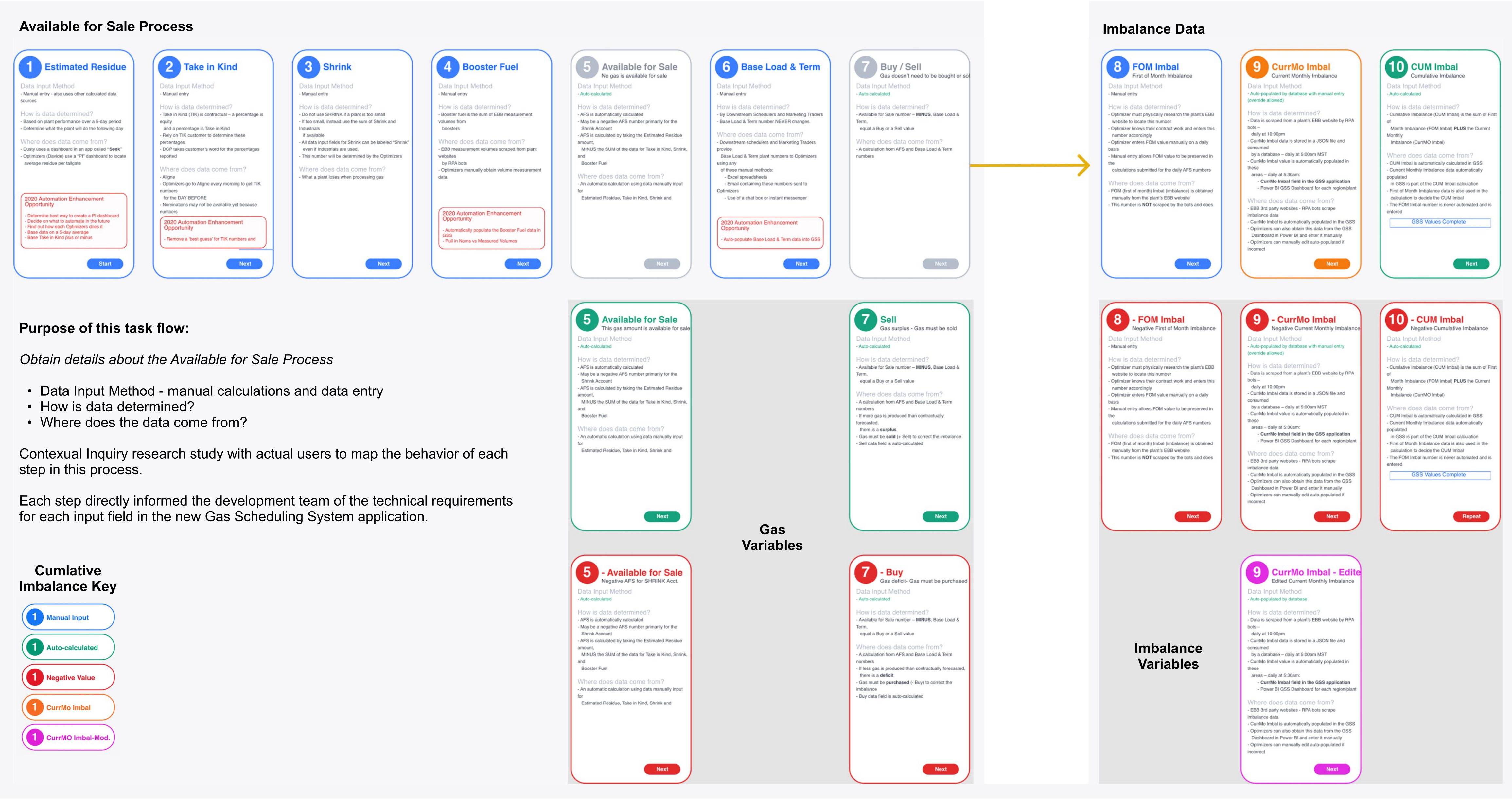


Gas Scheduling System That Eliminated Spreadsheets

GSS Optimizer Data Input Field Flow - Daily/Monthly Available for Sale & Imbalance Data



5

Available for Sale

This gas amount is available for sale

Data Input Method

- Auto-calculated

How is data determined?

- AFS is automatically calculated
- May be a negative AFS number primarily for the Shrink Account
- AFS is calculated by taking the Estimated Residue amount, MINUS the SUM of the data for Take in Kind, Shrink, and Booster Fuel

Where does data come from?

- An automatic calculation using data manually input for Estimated Residue, Take in Kind, Shrink and

GSS Values Complete

Next

7

Sell

Gas surplus - Gas must be sold

Data Input Method

- Auto-calculated

How is data determined?

- Available for Sale number – MINUS, Base Load & Term, equal a Buy or a Sell value

Where does data come from?

- A calculation from AFS and Base Load & Term numbers
- If more gas is produced than contractually forecasted, there is a **surplus**
- Gas must be **sold** (+ Sell) to correct the imbalance
- Sell data field is auto-calculated

GSS Values Complete

Next

5

- Available for Sale

Negative AFS for SHRINK Acct.

Data Input Method

- Auto-calculated

How is data determined?

- AFS is automatically calculated
- May be a negative AFS number primarily for the Shrink Account
- AFS is calculated by taking the Estimated Residue amount, MINUS the SUM of the data for Take in Kind, Shrink, and Booster Fuel

Where does data come from?

- An automatic calculation using data manually input for Estimated Residue, Take in Kind, Shrink and

GSS Values Complete

Next

7

- Buy

Gas deficit- Gas must be purchased

Data Input Method

- Auto-calculated

How is data determined?

- Available for Sale number – MINUS, Base Load & Term, equal a Buy or a Sell value

Where does data come from?

- A calculation from AFS and Base Load & Term numbers
- If less gas is produced than contractually forecasted, there is a **deficit**
- Gas must be **purchased** (- Buy) to correct the imbalance
- Buy data field is auto-calculated

GSS Values Complete

Next

8

- FOM Imbal

Negative First of Month Imbalance

Data Input Method

- Manual entry

How is data determined?

- Optimizer must physically research the plant's EBB website to locate this number
- Optimizer knows their contract work and enters this number accordingly
- Optimizer enters FOM value manually on a daily basis
- Manual entry allows FOM value to be preserved in the calculations submitted for the daily AFS numbers

Where does data come from?

- FOM (first of month) Imbal (imbalance) is obtained manually from the plant's EBB website
- This number is **NOT** scraped by the bots and does

GSS Values Complete

Next

9

- CurrMo Imbal

Negative Current Monthly Imbalance

Data Input Method

- Auto-populated by database with manual entry (override allowed)

How is data determined?

- Data is scraped from a plant's EBB website by RPA bots – daily at 10:00pm
- CurrMo Imbal data is stored in a JSON file and consumed by a database – daily at 5:00am MST
- CurrMo Imbal value is automatically populated in these areas – daily at 5:30am:
 - CurrMo Imbal field in the GSS application
 - Power BI GSS Dashboard for each region/plant

Where does data come from?

- EBB 3rd party websites - RPA bots scrape imbalance data
- CurrMo Imbal is automatically populated in the GSS Dashboard in Power BI and enter it manually
- Optimizers can manually edit auto-populated if incorrect

GSS Values Complete

Next

10

- CUM Imbal

Negative Cumulative Imbalance

Data Input Method

- Auto-calculated

How is data determined?

- Cumulative Imbalance (CUM Imbal) is the sum of First of Month Imbalance (FOM Imbal) PLUS the Current Monthly Imbalance (CurrMO Imbal)

Where does data come from?

- CUM Imbal is automatically calculated in GSS
- Current Monthly Imbalance data automatically populated in GSS is part of the CUM Imbal calculation
- First of Month Imbalance data is also used in the calculation to decide the CUM Imbal
- The FOM Imbal number is never automated and is entered

GSS Values Complete

Repeat

9

CurrMo Imbal - Edited

Edited Current Monthly Imbalance

Data Input Method

- Auto-populated by database

How is data determined?

- Data is scraped from a plant's EBB website by RPA bots – daily at 10:00pm
- CurrMo Imbal data is stored in a JSON file and consumed by a database – daily at 5:00am MST
- CurrMo Imbal value is automatically populated in these areas – daily at 5:30am:
 - CurrMo Imbal field in the GSS application
 - Power BI GSS Dashboard for each region/plant

Where does data come from?

- EBB 3rd party websites - RPA bots scrape imbalance data
- CurrMo Imbal is automatically populated in the GSS Dashboard in Power BI and enter it manually
- Optimizers can manually edit auto-populated if incorrect

GSS Values Complete

Next

Cumulative Imbalance Key

1

Manual Input

1

Auto-calculated

1

Negative Value

1

CurrMo Imbal

1

CurrMO Imbal-Mod.

Gas Variables