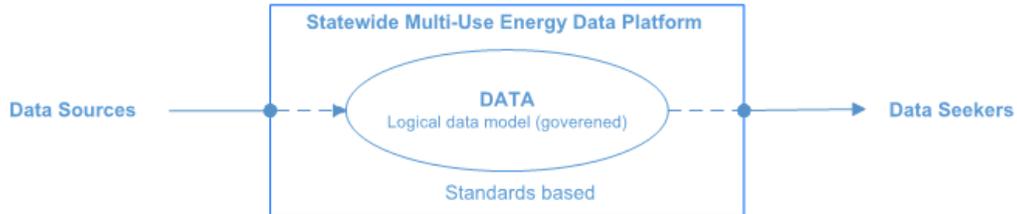


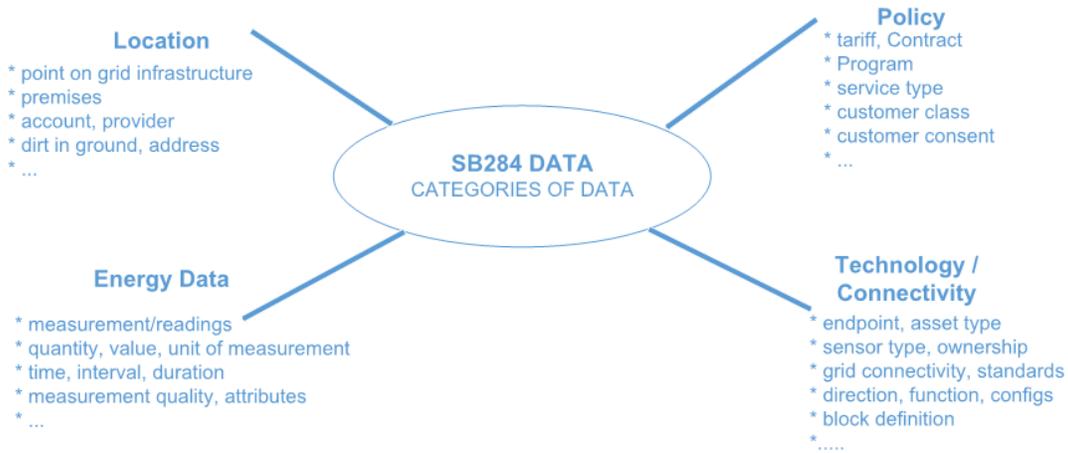
NH SB 284 Statewide Multi-Use Online Energy Data Platform

2 Page Brief

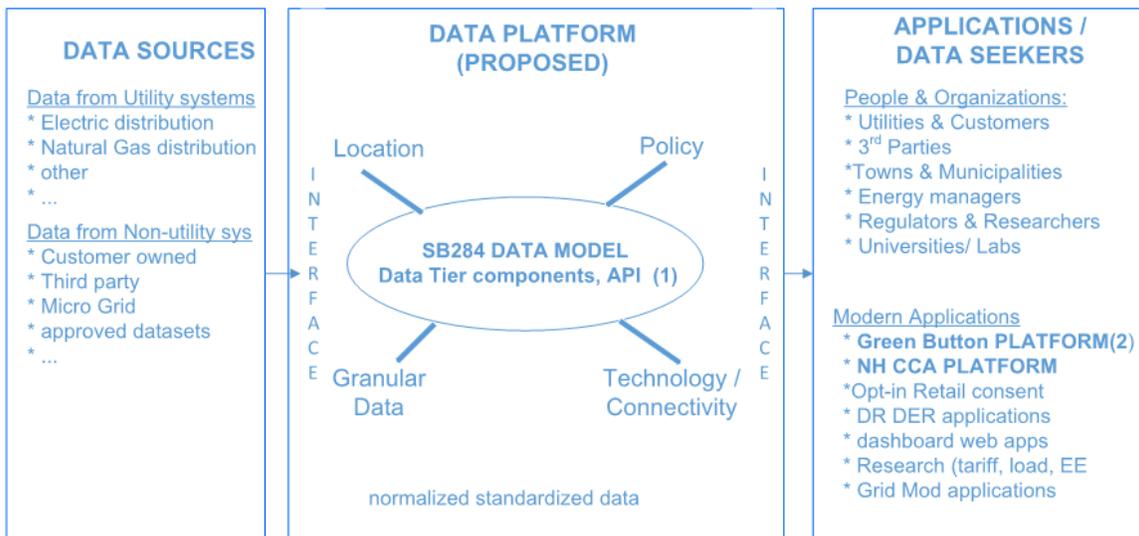
High level view- data flow:



Data Categories of NH Data Standard:



IT Applications & Organizations Using the Platform (permission requirement)



Note: 1. Versioned New Hampshire logical data model is an SB284 requirement
 2. Support of OpenESPI (Green Button) is an SB 284 requirement (data sharing format)

History of SB284 – Technical Perspective: -

A lengthy methodological collaborative analytical process supports the OCA's ongoing advocacy for statewide energy data sharing in New Hampshire, including the passage of SB284. Formally beginning in 2017 the OCA led an effort to create an initial data platform design that could support and enable New Hampshire's grid modernization goals.

OCA PUC Until: A five person team with expertise in utility engineering & operations, utility software and utility data systems, enterprise data modeling and system architecture, utility regulation, and project management was established - referred to as the 16-384 Data Working Group (DWG). Over 18+ months period a robust homegrown NH data model standard was designed - referred to as a logical data model. With follow-on efforts, a proposed system architecture, and straw three phase project plan leading to statewide data sharing platform by 2022 was developed and presented in testimony at NH legislature in SB284 proceedings.

Also beginning in 2017 and continuing today, OCA is conducting broad technical outreach, in NH and nationally, with data seekers, PUC's, utilities, PV / DER vendors & providers, consultants with systems and data sharing expertise, 3rd party vendors, universities, standards organizations, national labs and think tanks. The purpose of outreach is to validate and advance the work of the 16-384 DWG. The result of the outreach has been three fold including: gaining insight to what has worked and what hasn't worked in other states; receiving advice and comment on NH's data model and architecture; and (most importantly) identification of business requirements from diverse stakeholders of data seekers who would use the platform in many different ways for many different purposes.

Utilities, Customers, Energy Managers Consulted:

- NEW HAMPSHIRE: NHPUC, Lebanon Community Power, Dartmouth, Laboratory for Intelligent Integrated Networks of Engineering Systems (LIINES), City of Claremont, City of Dover, City Portsmouth, City of Concord, NH Department Administrative Services, Clean Energy New Hampshire, Liberty Utilities, Until, Eversource;
- VERMONT: VEIC, VELCO;
- ILLINOIS: Citizens Utility Board, Environmental Defense Fund;
- CALIFORNIA: PGE, CPUC;
- Massachusetts: National Grid
- NEW YORK: NY PSC Data Team, NY DPS, Joint Utilities of New York working group, ConEd, Deloitte, National Grid;
- OHIO: PUCO Staff, EnerNex; Data Working Group, System Planning Working Group (Power Forward);
- GEORGIA: Southern Company;
- TEXAS: PUC staff, Smart Meter Texas, Texas utilities;

Regional & National experts consulted:

- SYSTEM OPERATORS: ISO-NE; ERCOT;
- FEDERAL: DOE / Grid Mod; PNNL;
- ONTARIO: London Hydro, Energy Ministry
- EXPERTS: David Wollman NIST, Green Button Alliance, MissionData, Deloitte Consulting, Chris Villarreal DOE, Joe Palladino DOE, Sunrun, UtilityAPI, Freedom Energy Logistics