Lochinvar Boiler WH55, Jan 5, 2018, anticycling OFF, OD reset curve in use

ProOne stats have two probes; one in slab and ambient on head

Great room stat using slab probe for control; others in ambient feedback

Outside temp = -19°F

8am readings

		ProOne T755S stat data			T/C rdg	gpm		
area	**zone**	**Set point**	**Air temp**	**Slab temp**	**top flr**	**zone flow**	**floor type**	**Heat call?**
Garage	**1**		not running				conc	
craft room	**2**	68	69	88	—	0.5	carpet	
dining	**3**	64	65	62	—	1.0	carpet, thick	
kitchen	**4**	70	68	73	—	1.2	thin plastic	√
Great Rm	**5**	***78***	***66***	***78****	—	1.6	carpet	√
Guest Suite	**6**	64	63	77	—	0.7	carpet	√
M Bath	**7**	70	67	76	—	0.3	ceramic	√
M BR	**8**	70	67	81	—	0.6	carpet	√

dT at this time around 50°F SWT vs RWT

* upped Great Rm slab to 79°F @ 8am, and satisfied in 30 min

. . . after moving WILO ECO pump head setting(increased flow) from "5" to 12 ft of head

changing reset curve to prevent it from excessive high set pts

5pm readings

		ProOne T755S stat data			T/C rdg	gpm		
area	**zone**	**Set point**	**Air temp**	**Slab temp**	**top flr**	**zone flow**	**floor type**	**Heat call?**
Garage	**1**		not running				conc	
craft room	**2**	72.0	71.0	91.0	83.0	0.5	carpet	√
dining	**3**	70.0	67.0	69.0	76.0	1.0	carpet, thick	√
kitchen	**4**	74.0	72.0	80.0	81.0	1.2	thin plastic	√
Great Rm	**5**	***90.0***	***69.5***	***82****	77.0	1.6	carpet	√
Guest Suite	**6**	67.0	65.0	89.0	75.0	0.7	carpet	√
M Bath	**7**	70.0	68.0	85.0	77.0	0.3	ceramic	√
M BR	**8**	70.0	67.0	86.0	74.0	0.6	carpet	√

* Great Rm slab set at 90°F @ 10am, hit only 82°F

no other zones on slab / stat feedback yet. But changed reset curve and set pts

to force them all into demand calls and target 10 to 20°F dT between zone SWT vs RWT

Boiler at 100% Output, OD temp @ 0°F, Reset demand st pt at 122°F but boiler can only make 106 °F S

that is, system sensor = 106°F. Incoming return RWT = 90°F so 16°F dT w/ all zones in demand.

dT at 5 pm = 17°F (SWT vs RWT)

ProOne T755S stat: https://www.pro1iaq.com/hydronic-slab-sensor/t755s-r250s

. . . after reprogram of stats for probe sensing

dT = 29°F (SWT vs RWT) with -10°F outside and 3 zones in demand, WILO = 12 ft

7:30 pm readings

		ProOne T755S stat data			T/C rdg	gpm *		
area	**zone**	**Set point**	**Air temp**	**Slab temp**	**top flr**	**zone flow**	**floor type**	**Heat call?**
Garage	**1**		not running				conc	
craft room	**2**	90.0	71.0	94.0	80.0	0.5	carpet	
dining	**3**	73.0	69.0	73.0	72.0	1.0	carpet, thick	
kitchen	**4**	81.0	72.0	81.0	76.0	1.2	thin plastic	√
Great Rm	**5**	***90.0***	***69.5***	***95.0***	79.0	1.6	carpet	

Guest Suite	**6**	88.0	68.0	89.0	75.0	0.7	carpet	
M Bath	**7**	88.0	69.0	86.0	77.0	0.3	ceramic	√
M BR	**8**	89.0	67.0	87.0	74.0	0.6	carpet	√

95°F in Great rm due to using air sensor during day just before these readings and changeove

ProOne will not allow setting above 90°F due to top end of its specified range of contr

* gpm data re-used from when all six zones ON, not accurate with 3 zones