Number	# Atoms	Net Charge	Atom Position	Octet Limit	Atomic Charge	bond max	e-negativity	Orbital Overlap	WINNER	Comments
1			H							moving H gives isomer
2			H							
3						X				don't just give up a bond
4				CC		X				
5			H							
6				O		X				
7				O	CO					
8						X		x	y	OK, but not HOMO/LUMO
9						X	X			lose bond and bad e-negativity
10			X							
11						X		x	y	OK, but not HOMO/LUMO
12	H		H							
13		X	H	C						
14		X		C						
15			HO	C						
16				CC						extra electrons for 3rd bond?
17								X		no overlap between π_{CC} and σ^*_{CO}
18	H			O				X		
19			H			X				
20									Y	**torsion so σ^*_{OH} overlaps π_{CC}**
21		X			O					
22		X								
23				O	O					
24	H	X			C					
25	H				C					
26		X			O					
27			H?						y	see below
28							x		Y	**mixing n_O with π^*_{CC}**
29									Y	mixing σ_{CH} with σ^*_{OH}