```
digraph proof {
    # All nodes except Gathered (PO) have edges towards Majority (P1),
    # so for ease of read we do not write them down.
    # Similarly, self loops are always present and thus not represented.
    # Ending cases
    P [label="Gathered"]; # measure = (0, 0)
    P0 [label="Majority"]; # measure = (0, n) n > 0
    # Diameter cases
    P1 [label="Diameter-clean"] # measure = (1, n)
    P2 [label="Diameter-dirty"] # measure = (2, n)
    # Case of triangles
    P3s [label="Scalene-clean"]; # measure = (3, n)
    P4s [label="Scalene-dirty"]; # measure = (4, n)
    P3i [label="Isoceles-clean"]; # measure = (3, n)
    P4i [label="Isoceles-dirty"]; # measure = (4, n)
    P3e [label="Equilateral-clean"]; # measure = (3, n)
    P4e [label="Equilateral-dirty"]; # measure = (4, n)
    # Generic cases
    P5 [label="Generic-clean"]; # measure = (5, n)
    P6 [label="Generic-dirty"]; # measure = (6, n)
    P0 -> P;
    P1 -> P;
    P2 -> P1;
    P3e -> {P2 P};
    P4e -> P3e;
    P4s -> P3s;
    P4i -> P3i;
    P3i -> P;
    P3s -> P;
    P5 -> {P3e P4i P4s};
    P6 -> P5;
}
```

