MGA LCFS Advisory Group Meeting 2 Chicago, IL

February 17-18, 2010

Welcome and Introductions

- Name
- Affiliation
- Are you going to dinner?

Guidelines

- Advisory Group is Advisory
- Strive for consensus, no voting
- Active participation limited to advisory group participants
- Observers will have opportunities to offer input
- Advisory group role is implementing, rather than fundamentally revisiting, MGA agreements

Ground Rules

- It is your show
- Everyone is equal
- No relevant topic is excluded
- No discussion is ended
- Respect opinions
- Respect time
- Group decision-making
- Non-attribution

Expectations for Communicating about the Process

- You are NOT expected to support an LCFS

- You ARE expected to:
  - Bring criticisms of the process to the group first
  - Avoid communicating about decisions that haven't been made yet
  - Remember the goals of the process

Objectives for this process

- Create a framework and incentives for development of, and demand for, low carbon fuels in the Midwest;
- Decrease the GHG intensity of transportation fuels;
- **Take advantage of our agricultural and industrial strengths to benefit our regional economy** while protecting our natural resources; and
- Complement other policies focused on improving transportation efficiency and reducing GHG emissions in the region.

MGA has given us an outline

- 2005 baseline
- At least a 10% reduction over 10 years
- Make recommendations on design features
- Make recommendations on LCA scores
- Make recommendations on non-GHG environmental issues

MGA has made recommendations on other policies

- Transportation:
  - Fuel infrastructure
  - VMT reduction
  - Transit
  - Bike/ped
  - Planning
  - Vehicle efficiency

MGA has made recommendations in other areas

- Renewable electricity
- CCS and advanced coal
- Energy Efficiency
- Energy infrastructure
- Jobs

Objectives for this meeting

- What we will accomplish:
  - Hear from all subgroups, give guidance
  - Assure that all of the issues are on the table
  - Make final decisions about scope
  - Make directional decisions about content (e.g. – whether to include a type of content, but not agreeing on final language)

- What we will NOT accomplish:
  - Make final decisions about content

Agenda

Day 1:

- 2:30 – Model rule discussion
- 3:30 – Break
- 3:45 – Comments from observers
- 4:00 – Subgroup presentations
- 6:00 – Adjourn

Day 2:

- 7:30 – Continental breakfast served
- 8:00 – Full group discussion
- 9:15 – Comments from observers
- 9:45 – Break
- 10:00- Subgroup discussion
- 12:00 – Lunch
- 1:00 – Full group discussion
- 2:00 Adjourn

Full Group Discussion Items

- Treatment of crude oil pathways (Data subgroup, Compliance subgroup)
- ILUC (Leakage subgroup)
- Incremental benefit of LCFS over RFS (Data subgroup, Compliance subgroup)

Model Rule Outline Discussion

- 2:30 p.m.
- Larry Bruss, Wisconsin DNR

Model Rule Discussion

- Draft model rule outline
- Compliance process flow diagram

Subgroup Presentations

- 4:00 – Leakage and other environmental impacts
- 4:30 – Compliance, credit trading, and cost-containment
- 5:00 – Federal policy and other state policies
- 5:30 – Data, modeling, and analysis
- 6:00 – Meeting adjourned

Day 2 Agenda

- 7:30 – Continental breakfast served
- 8:00 – Full group discussion
- 9:15 – Comments from observers
- 9:45 – Break
- 10:00- Subgroup discussion
- 12:00 – Lunch
- 1:00 – Full group discussion
- 2:00 Adjourn

This evening

- 6:30 p.m. Complementary reception
  - Elephant and Castle Pub
  - Located in the Avenue Hotel
- 7:30 p.m. Complementary dinner
  - C-House Restaurant
  - 1 block north, in the Affinia Hotel, 1st Floor

Day 2 Agenda

- 9:30 – 11:30 – Full Group Discussion
- 11:30 – 12:00 – Comments from observers
- 12:00-12:30 – Lunch
- 12:30 – 2:00 – Subgroup discussion
- 1:45-2:00 – Closing remarks
- 2:00 Adjourn

Full Group Discussion

- Goals:
  - Discuss issues that exist in multiple subgroups
  - Discuss issues that are higher profile or particularly sensitive and require full group input
  - Assure that no important considerations are left off the table
  - Get a better sense of the range of opinions in the group
  - Make directional decisions about how to structure future work to resolve these issues

Full Group Discussion Items

- Treatment of crude oil pathways (Data subgroup, Compliance subgroup)
- ILUC (Leakage subgroup)
- Incremental benefit of LCFS over RFS (Data subgroup, Compliance subgroup, federal and other state subgroup)
- Individualized plant values – how can we improve upon previous policies?

Treatment of oil pathways

- Options:
  - Differentiate oil pathways
  - Do not differentiate oil pathways
  - Hybrid approach

Option 1

- Differentiate oil pathways:
  - Advantage:
    - Oil producers are rewarded for process improvements:
      - CO2 EOR
      - Various oil sand process improvements
  - Disadvantage:
    - Leads to crude oil switching as a primary mode of compliance
    - Lack of information about crude oil pathways

Option 2

- Do not differentiate crude pathways:
  - Calculate an “average” crude for the Midwest
  - All MW gasoline has the same score and all diesel has the same score
- Advantage:
  - Avoids crude switching, data availability problems
- Disadvantage:
  - No opportunity to reward innovative low GHG intensity petroleum practices

Option 3?

- Hybrid approach:
  - For compliance purposes, all gasoline has the same score and all diesel has the same score
  - Separately, crude oil producers may choose to demonstrate GHG intensity improvements relative to their own baseline. They could generate credits and be rewarded for innovation.

Option 3 example

- Producer X has a real score of 105 g/mJ, produces 10 mJ/yr
- From 2005 to 2010 they reduce their intensity to 100 g/mJ
- The average score would be 98 g/mJ
- For compliance purposes, their score is 98 g/mJ
- From 2005 – 2010, they generate credits equivalent to (10 mJ/yr *5yrs*5g/mJ=250g)

Option 4 (could be applied to all other options)

- Another hybrid option
- All gasoline/diesel receive an average Midwestern score
- Allow crude oil producers with a score better than the average to apply to be treated separately
- E.g. – All gasoline is assigned a score of 98 g/mJ. A producer of oil using EOR has a score of 90. They can apply to be treated as a “low carbon fuel”.

ILUC

- Opposition to ILUC is a major reason many groups are in the process
- Some participants are still in favor of using ILUC in the Midwest

Incremental benefit of LCFS

- Question:
  - What are the incremental benefits of an LCFS on top of those benefits provides by the RFS?
  - Would RFS2 achieve a 10% reduction? Under what scenarios?

- Goal for discussion:
  - What criteria would we use to evaluate whether a MW LCFS offers incremental benefits over and above RFS2?

Benefits/cost of LCFS over RFS + other climate and energy policies

- Address negatives of LCFS as well as benefits
- Fuel diversity
- Recognition of improved efficiency of existing fuel pathways
- List other policies we're including in the baseline

Individualized plant values

- How to improve on CA/EPA

Subgroup discussion

[ADD LOCATIONS]

- Model Rule – Amanda Bilek
- Leakage – Brendan Jordan
- Data – Dane McFarlane
- Compliance – Jennifer Johnson
- Other policies – Jessica Shipley

Full Group Discussion

- Loose ends, next steps
- Revised timeline

Proposed deliverables

- No model rule
- Deliverables:
  - List of critiques CA rule
  - List of critiques of RFS2
  - Fleshed out version of LCFS design considerations
  - Analysis report
  - Federal recommendations (is this RFS recommendations)
- New subgroup on alternative policies that accomplish LCFS goals as options for MGA to consider

Revised agenda

1:00 – 1:15: Comments from observers

Two tracks:

- 1:15 – 2:00: Modeling/data subgroup meets separately (in the hall)

- 1:15 – 2:00: Full group discussion
  - Brainstorm critiques of CA or RFS2 (in this room)