

**VIRGINIA TOBACCO INDEMNIFICATION
AND COMMUNITY REVITALIZATION COMMISSION**

701 East Franklin Street, Suite 501
Richmond, Virginia 23219

Research and Development Committee Meeting

Wednesday, May 7, 2014

9:00 o'clock a.m.

Hotel Roanoke & Conference Center
Roanoke, Virginia

CRANE-SNEAD & ASSOCIATES, INC.
4914 Fitzhugh Avenue, Suite 203
Richmond, Virginia 23230
Tel. No. (804) 355-4335
Fax No. (804) 355-7922

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

1 APPEARANCES:

2 The Honorable Kathy J. Byron, Chairman

3 Ms. Cindy M. Thomas, Vice Chairman

4 The Honorable Charles W. Carrico, Sr.

5 Ms. Mary Rae Carter, Deputy Secretary

6 Department of Commerce and Trade

7 Rural Economic Development

8 The Honorable Ben Chafin

9 Mr. Burgess "Butch" H. Hamlet, III

10 The Honorable Maurice Jones, Secretary

11 Department of Commerce and Trade

12 The Honorable Daniel W. Marshall, III

13 Dr. Todd Pillion

14 Mr. Kenneth O. Reynolds

15 The Honorable Frank M. Ruff

16 The Honorable Ralph K. Smith

17

18

19

20

21

22

23

24

25

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

COMMISSION STAFF:

- Mr. Timothy S. Pfohl, Interim Executive Director
Grants Program Administration Director
- Ms. Sarah K. Capps, Grants Program Administrator -
Southside Virginia
- Ms. Sara G. Williams, Grants Program Administrator -
Southwest Virginia
- Ms. Carolyn Bringman, Performance Data Analyst
- Ms. Stacey Richardson, Executive Assistant

1 May 7, 2014

2

3

DELEGATE BYRON: Good morning. I'm going to call the meeting of the Research and Development Committee to order. And I'll ask Tim if you will please call the roll.

6

MR. PFOHL: Delegate Byron.

7

DELEGATE BYRON: Here.

8

MR. PFOHL: Senator Carrico.

9

SENATOR CARRICO: Here.

10

MR. PFOHL: Delegate Chafin.

11

DELEGATE CHAFIN: Here.

12

MR. PFOHL: Mr. Hamlet.

13

MR. HAMLET: Here.

14

MR. PFOHL: Secretary Jones is on the phone.

15

And Special Advisor, Mary Rae Carter, is with us.

16

DEPUTY SECRETARY CARTER: Here.

17

MR. PFOHL: Delegate Marshall.

18

DELEGATE MARSHALL: Here.

19

MR. PFOHL: Ms. Moss and Ms. Nyholm have notified us they can't be here today.

21

MR. PFOHL: Dr. Pillion.

22

DR. PILLION: Here.

23

MR. PFOHL: Mr. Reynolds.

24

MR. REYNOLDS: Here.

25

MR. PFOHL: Senator Smith.

1 SENATOR SMITH: Here.

2 MR. PFOHL: I'm sorry, Senator Ruff.

3 SENATOR RUFF: Here.

4 MR. PFOHL: And Ms. Thomas.

5 MS. THOMAS: Here.

6 MR. PFOHL: You have a quorum.

7 DELEGATE BYRON: All right, we've got quite a big
8 agenda today. First, we're going to approve the minutes from
9 January the 6th?

10 MR. PFOHL: Yes, January 6th.

11 DELEGATE BYRON: January minutes. I've got a
12 motion and a second. All those in favor, say aye. (Ayes).
13 Opposed? (No response).

14 SENATOR RUFF: Mr. Chairman, just to begin this
15 process, particularly since Secretary Jones is on the phone, so if
16 we could have a recap.

17 SECRETARY JONES: If you all could turn the volume
18 up a little bit.

19 DELEGATE BYRON: Talk into the mike.

20 SENATOR RUFF: Madam Chairman, since Secretary
21 Jones is on the phone, could it possible to have a recap of what
22 we've done so far in this committee and what the objectives are.

23 MR. PFOHL: Yes, I'll try to wing this. About four
24 years ago, the Commission made a \$100 million commitment to
25 create the Research and Development Program, and that \$100

1 million was obtained from our endowment, and so that balance
2 today is in the \$30 million ball park. The first efforts out of the
3 gate were to fund the construction of the research centers that
4 are distributed across the Tobacco Region. And, subsequently,
5 we've been working with applications on typically three cycles per
6 year for projects that are submitted by eligible applicants and
7 government and nonprofit organizations, but in the vast majority
8 of cases benefit private researchers and companies.

9 And so, today, we've got five projects that have come
10 through the vetting process, eight that are new submissions. We
11 have funded more than 30 projects to date, and we have some
12 that have been very successful, we've had some that have
13 wound down and not led to commercialization. We'll talk a little
14 bit later today about some projects that have actually closed
15 down without reaching their commercialization objective. So, I
16 think that's part of this process, and we're putting a little higher
17 risk of venture money out there to attract jobs and
18 commercialization in private investment in the Tobacco Region.
19 Some are working, some have not panned out the way we might
20 have hoped, but that brings us to this process here today.

21 SENATOR RUFF: Madam Chairman, do we have any
22 recap of dollars invested, capital invested, and jobs created?

23 MS. PFOHL: Carolyn, how long ago was it that you did
24 a survey of the applicants?

25 MS. BRINGMAN: Last year at this time.

1 MR. PFOHL: Yes, okay. So, about a year ago, we
2 surveyed all of the R&D recipients and asked for outcomes and
3 actual jobs created in private investment. We'll probably do or
4 another one of those surveys, and we'll be happy to undertake
5 that task this summer, you have summer homework.

6 DELEGATE BYRON: I had also planned as the
7 Chairman of the Committee to go around and visit some of the
8 sites and see where they're at in their stage of R&D. As you
9 know, many of these aren't just job-related, and we have criteria
10 as we went along and we tried to tweak what our goals and
11 expectations were for each of these, as well. But I need some
12 time to be, go one-on-one, being able to go out and see some of
13 those, so if anyone else is interested or has the additional time,
14 time is very valuable these days with many people, so any
15 additional time, get in touch with Tim and let him know so we
16 can try and coordinate.

17 DELEGATE MARSHALL: Madam Chairman, we also
18 have a new member today, Delegate Ben Chafin. Welcome.

19 DELEGATE CHAFIN: Thank you.

20 DELEGATE BYRON: So, you're new to R&D.

21 DELEGATE CHAFIN: Yes.

22 DELEGATE BYRON: Glad to have you.

23 Now, we're going to start with Jerry Giles, who heads
24 up the group that reviews each of these applications until we
25 send it to vetting and then we get our scores and some

1 background information.

2 MR. GILES: Thank you very much. Thank you,
3 Madam Chairman, and members of the R&D Committee, and
4 those in the audience this morning. I have to forewarn you my
5 voice does not project all that robustly, so if you have a difficult
6 time hearing what I'm saying, whether I'm saying it in front of
7 you, or, you know, if I have my back to you, please notify me
8 and I'll try to speak louder.

9 For the benefit of those that are here in the room,
10 Secretary Jones, I don't know whether you have a copy of the
11 slides or not. The first slide that I'll show you, and there's only
12 three, is basically a statement of fact that we're now wrapping up
13 and I'm reporting on Round 10 of this overall vetting process.
14 We had the face-to-face defenses by the five applicant teams in
15 March, and I show an April date because I wasn't quite certain as
16 when your next meeting for the R&D Committee would take
17 place.

18 Go to the second slide. For those of you who have
19 been on the R&D Committee for a short while, and perhaps this
20 is new information for those of you just joining us today for the
21 first time. Basically, the parameters that the process goes
22 through is to evaluate the written applications and the face-to-
23 face defenses based on five elements in a scientific space. In the
24 science space, it weighs the adequacy of the concepts when
25 looking at the stage of technical development at the time that

1 the application is reviewed. Looking at technical
2 expertise/credentials of the R&D team itself. We're asking
3 ourselves the question, are there competing technologies which
4 are more likely to achieve the same or greater commercial
5 outcomes on what is being reviewed?

6 Finally, in the science phase, did the applicant team
7 define sufficiently the project milestones and is there adequate
8 evidence of resources and resources measured both in financial
9 terms and human asset resources to achieve these milestones?

10 We then move on in the logical process to the
11 commercialization elements. The commercialization track
12 evaluation scoring are also defined. The first question is, is the
13 technical solutions sufficiently scalable to achieve the stated
14 outcomes and economic impact meaning transforms it to the
15 region in the Tobacco footprint and to its aspirational job creation
16 potential?

17 Second, is the IP portfolio adequate and is there a
18 clear commercialization pathway from the inventor to the
19 commercialization partner? That's a key element.

20 Thirdly, is there a declared market for this technical
21 solution developed and sufficiently robust to support pro forma
22 growth predictions by the applicant team? Is the proposed
23 management team, we've already talked about the R&D science
24 team, but is the proposed management team adequately
25 experienced to achieve the declared outcomes?

1 Fifthly, is the specific value proposition defensible and
2 powerful enough to achieve the declared outcomes? Several
3 reiterations ago in the process at the behest of the R&D
4 Committee, we added an eleventh omnibus category and that is
5 on business planning quality and the overall value proposition
6 defense.

7 Let's go to the third slide. The third slide is a recap at
8 a high level, identifying the five applications that went through
9 the process in Round Ten. Those are listed. I will read these
10 since we do have some communicating time just in numerical
11 order of applications. 2828, which is HHS Coal Refining, was a
12 request for \$1,181,075. The projection in terms of new job
13 creation was five full-time equivalents.

14 The second application, Number 2830, submitted on
15 behalf of Simmons Equipment, the request for that \$1,143,863,
16 with a declared 30-job creation potential over a time.

17 Application 2831, Fermata, V2G, stands for Vehicle-to-
18 Grid, \$2 million, and projection of 127 new jobs being created.

19 Application 2832, on behalf of Bristol Compressors,
20 that request is for \$808,744, and that's really a to-be-determined
21 in terms of new incremental jobs being created.

22 And the fifth application, 2833, OptaFuel, that was a
23 request for \$2 million for 35 new jobs being created, and they're
24 pro forma projections.

25 Each time that we go through one of these processes,

1 we use basically 10 UTs, and I'll read these out.

2 University of Virginia, Virginia Tech University, West
3 Virginia University, Virginia Commonwealth University, Georgia
4 Institute of Technology, University of Maryland, CH2M Hill, that's
5 a globally-recognized engineering firm, SRI International, SJ
6 Ventures, which is a venture capital firm at our Center for
7 Advanced Engineering and Research based in Bedford.

8 I will point out that when we have a situation, as we
9 did with 2828, the HHS Coal Refining application, which had
10 tremendous input from Virginia Tech, and also 2831, Fermata
11 V2G, which has tremendous input and basically horsepower
12 coming from the University of Virginia. Those two respected
13 institutions, as per our operating policy, recused themselves.
14 They did not submit any scores or comments as part of the
15 process. So, we don't have any issues related to conflict of
16 interest, at least not from this point in the process.

17 The scoring grid shows scores in big, bold, red type.
18 I'll point out to all of you who can see these, that the scores
19 intentionally do not match up with the numerical order of the
20 applications that I just read off.

21 What I'd like to do, unless we're pressed for time, is
22 to go into a little bit further detail in terms of the applications
23 under a new given cycle and give the benefit of some of the
24 comments that came from the review panel process team leaders
25 following the face-to-face defenses. Each member of the R&D

1 Committee several weeks ago received the confidential
2 information that I'm reading from this morning. I will not cite
3 scores, and it's totally inappropriate to do that in a public forum.

4 We'll begin with HHS Coal Refining Process. It's an
5 application that came in from the Lee County IDA, requesting, as
6 I mentioned previously, \$1,181,075, to enable a company,
7 Minerals Refining Company, LLC, which is a Richmond-based
8 corporation, to engineer and construct a pilot dewatering facility
9 capable of processing one ton per hour of ultra-fine coal
10 particles, using a hydrophobic-hydrophilic process, or
11 abbreviated HHP. This bench scale proof-of-concept research
12 was done at Virginia Tech, and the overarching research
13 objective is to commercialize the HHS process. MRC states that
14 it has an exclusive world-wide license from VT Intellectual
15 Property to accomplish commercialization.

16 The pilot facility would require five employees, and
17 while there is no commitment for private sector capital
18 investment beyond this demonstration initiative, the beneficiary
19 indicates that it will own and operate adjunct plants, which will
20 use the HHS technology as a contracted processor at nine
21 coal/mineral processing plants across Southwest Virginia. As
22 proposed, MRC would own the equipment, which is noted by staff
23 not a condition, it's a clear exception to the Committee's long-
24 established policy stipulating that eligible applicants rather than
25 private beneficiaries own assets purchased with TICRC funds.

1 Staff states parenthetically that budget could be
2 modified such that necessary equipment expenditures total 50
3 percent of project costs, to be paid for with state funds, owned
4 by the Lee County IDA, and leased to MRC. MRC would then be
5 responsible for all equipment budget expenditures. Based upon
6 the projected budget, the Tobacco Commission's commitment
7 would total \$1,369,138, an amount slightly larger than originally
8 requested.

9 What I'd like to do now and share with those in
10 attendance and participating by phone is just a brief recap of the
11 take-away points from the review process overall. And I will
12 begin with the science elements for this particular application.
13 There is strengths. The team has access to professionals with a
14 sound understanding, advisory board is, to provide you with
15 guidance.

16 The proposal has the potential to substantially reduce
17 environmentally hazardous wastes and recover process. Proof of
18 concept demonstrated in face-to-face meeting to the review
19 panel's team leaders' satisfaction.

20 The weakness category scheduled for power plant
21 construction and testing may be too aggressive, and processing
22 could be a concern.

23 On the commercialization side of this application from
24 the strength's category, the feasibility of intellectual property
25 well established in the laboratory scale, marketed as described as

1 potentially very significant and appropriate for the region. Clear
2 measurable criteria to exit the pilot or project. The profit-sharing
3 model seems innovative and appropriate for this particular
4 industry.

5 With respect to the next application, 2830, Simmons
6 Equipment. The Southwest Virginia Higher Education Fund has
7 modified the project budget consistent with recommendations by
8 the Commission staff, and now requests \$1,143,863 to enable
9 Tazewell County based Simmons Equipment Company, Inc. to
10 finalize product development and begin manufacturing and sales
11 of an innovative battery-powered coal hauler for low-seam
12 underground coal mining.

13 By way of background, Simmons was established in
14 2005 as a designer, manufacturer, and servicer of battery-
15 powered mining equipment, although the company's industry
16 expertise dates to, dates to the 1960s. Design and development
17 of the battery-powered hauler is already underway. The
18 application lists 53 new jobs, but that figure has been
19 subsequently revised to 30, as I mentioned in the recap earlier.
20 Private capital investment is projected as \$1,900,000, and these
21 figures, as revised, would be required to first and fully comply
22 with the terms of a Grant Agreement.

23 The timeline of project activities and expenses
24 indicates that product development and refinement, including
25 placing haulers in the field and securing feedback from

1 customers, will require approximately 18 months ending Quarter
2 3 of 2015. Matching funds are not yet committed and available.
3 The company is currently raising equity and anticipates additional
4 bank financing, and consistent with established policy, no
5 Tobacco Commission-funded monies would be disbursed until all
6 financing necessary to accomplish the project objectives is
7 secured.

8 The Southwest Virginia Higher Education Foundation
9 once again proposes that the intended grant be invested as
10 equity and/or convertible debt in the company, to be held by the
11 Foundation, with any investment returns to be used by the
12 Foundation to fund future R&D projects. Please note that
13 Simmons Equipment Company, Inc. proposes allocating a, quote,
14 blended average of the company's personnel costs, quote, and,
15 quote, plant and equipment costs, unquote, as a match rather
16 than dedicated personnel and other project specific costs, that is,
17 continuous charges, equipment, such as that. Milestones and
18 deliverables are clear and measurable. Staff recommends
19 referral to the vetting process, which, in fact, took place.

20 With respect to the comments concerning the science
21 phase, this application, of thin seam coal mining, significant
22 development expertise, and especially with respect to Mr. J. L.
23 Simmons. Competing technologies describe in detail and
24 favorable performance compared to its competitors. Detailed
25 design information presented and appropriate risks to the pilot

1 project as proposed. The weaknesses designed on paper only.
2 No technical R&D team identified other than Mr. J. L. Simmons.
3 Advantages on paper only have not been proven or
4 substantiated.

5 From the commercialization side, strengths,
6 interchangeable parts and modular design reinforces good
7 operating model. Small and more nimble company than its
8 competition. Entrepreneurial culture within the management
9 team and the organization itself. Product is appropriate to
10 region, and the company is committed to stay in the region and
11 appears to be addressing an undisturbed niche. The weaknesses
12 or projections in the proposal is not supported sufficiently to the
13 satisfaction of the majority of the team leaders.

14 Application 2831, Fermata V2G, once again, Vehicle-
15 to-Grid. UVA requests \$2 million for a three-year project period
16 to enable Fermata, LLC, a Charlottesville-based corporation,
17 created by UVA researchers, to develop technology that enables
18 electric vehicles and plug-in hybrids to provide energy storage
19 with the grid.

20 Specific tasks for the vehicle-to-grid applied R&D
21 initiative include the development of a vehicle drivetrain, vehicle
22 battery pack, the bi-directional V2G charger, and V2G software,
23 based on technologies developed at the University of Delaware,
24 and licensed to Fermata.

25 In working in the City of Danville, Fermata has

1 identified possible locations for a V2G test facility with live grid
2 interconnect, 10,00 square feet, growing to 20,000 square feet
3 projected by 2016. Fermata states that \$2,683,000 of private
4 capital investment has already been raised to meet the program
5 match requirements, and 127 direct manufacturing jobs are
6 expected to result from the project by 2017. These would be
7 required in order to first and fully comply with the terms of a
8 Grant Agreement.

9 Technology would be built and tested over a three-
10 year period anticipated to conclude Quarter 2, 2017. The
11 milestones and deliverables are clear and measureable. Tobacco
12 Commission funds would be used in all line items with most or
13 approximately 90 percent supporting personnel expenses.

14 Minor adjustments may be needed depending on the
15 ownership of the facility in Danville that is selected. All matching
16 funds are committed and available, and Fermata anticipates
17 spending at least \$1 million of the matching funds in the Tobacco
18 footprint. Once again, staff refers to the VEDP for vetting
19 process.

20 Take away observations in defense, and the applicant
21 team and the science of the strengths, the department has
22 strong expertise in vehicle design and vehicle-to-grid technology.
23 Have a municipal utility partner appears to be on board.
24 Weaknesses, proposal, unfocused and unclear whether it is
25 developing vehicles, developing V2G technology, or creating a

1 research center to develop these technologies.

2 The University of Delaware already has a V2G
3 research center with a high visible quality. Different education
4 arguments not given by the applicant team satisfactorily. Most
5 current electric vehicle manufacturers do not embrace V2G
6 technology. These are concerns, impacts on battery life and
7 warranties, as well as invading the brand energy.

8 On the commercialization side, strengths, V2G, V2G
9 Technology has tremendous potential for transformational
10 change at some point in the future. Quality and reputation on
11 the outside partners and the board and this applicant team has
12 considerable credibility. The management team in part appears
13 to have good contacts through various V2G advocacy.
14 Weaknesses. The new proposed application centered in a
15 research center region, there was no justification offered for
16 sustainable financial profitability.

17 Market predictability is impossible to forecast with any
18 timeline certain. A feeling of unrealistic assessment capital
19 needs. Basically they go to full market penetration. No full-time
20 management team in place, and one part-time researcher, and
21 the rest are part-time advisors.

22 Application Number 2832. Bristol Compressors.
23 Washington County IDA requests \$808,744 to enable Bristol
24 Compressors International, Inc. to establish an on-site testing
25 facility to safely develop and evaluate flammable types of

1 refrigerants, such as propane that are consistent with mandated
2 low GWP, meaning Global Warming Potential, standards. Testing
3 with competitor's products is underway. This project is viewed
4 as essential for Bristol Compressors International, Inc. to
5 maintain and grow market share as a UL-approved worldwide
6 supplier of compressors to major OEMs, such as Goodman and
7 Rheem. This research effort would involve purchase and
8 installation of equipment and the involvement of existing
9 employees with Tobacco Commission funding for both budget
10 categories.

11 Staff believes that the budget could be modified such
12 that Tobacco Commission funds would be used for equipment
13 purchases, i.e., calorimeters, chillers, test stands, chiller, test
14 compressors, sensors, et cetera. It would be owned by the IDA
15 and leased on a nominal basis to the beneficiary at Bristol
16 Compressors. And personnel expenses, as described, would be
17 the responsibility of the company for dedicated personnel and
18 facility upgrades in a manner consistent with one-to-one cost-
19 sharing.

20 No new equipment is projected, though the
21 anticipated \$80,000,000 to \$120,000,000 in new business is
22 discussed as equivalent of growing the Bristol workforce from
23 300 to 500-plus employees. No follow-on private capital
24 investment is projected, and this was recommended as is obvious
25 to the review panel for full vetting.

1 In terms of science, comments and take-aways, on
2 the strength side, the team exhibited solid understanding of the
3 technology and market dynamics. Allows for a potential entry
4 into a more environmentally friendly market and the project plan,
5 which was presented and defended was very good.

6 The weaknesses, it appears to be more of a testing
7 program for a single refrigerant and a single compressor source.
8 It appears to be a capital equipment program. No request made
9 for update and technical know-how. Transformational agenda
10 was related to, quote, -- unquote, deliverable project downside,
11 and the risks attached to that. And they did not capture the
12 tasks necessary to cover all potential application.

13 On the commercialization side, the strengths, long-
14 term established company, they know their markets, and they
15 know their competitors well. They need to move to the low
16 global warming potential, GWP, and clear, and it's clear the
17 refrigerant will create new commercial market.

18 Weaknesses, question of ability of the company to
19 self-fund the project, and it's really a capital acquisition project,
20 which is an R&D effort, and potential impacts of Tobacco
21 Commission funds on new job growth really were not well
22 thought out in the proposal though.

23 Lastly, Application Number 2833. OptaFuel.
24 Southwest Virginia Higher Education Foundation requests
25 \$2 million, as the third award benefitting OptaFuel in the Tobacco

1 Region, OPTOR, a subsidiary of Biomethodes SA, which is based
2 in France. Previous awards total approximately \$7 million.
3 OPTOR's objective is to demonstrate at the pilot scale, that is
4 development lab currently in Norton, Virginia, an integrated
5 chemical-enzymatic process allowing for the conversion of
6 multiple cellulosic biomass feedstocks to ethanol, lignin, and
7 other high value biochemical and biomaterials. The technology
8 platform was developed by the parent company out of France
9 and Virginia Tech, and OPTOR intends to market the process to
10 North America industrial customers seeking to either convert one
11 generation bio-refineries into a 2nd generation new process, or to
12 build and operate a brand new 2 generation bio-product.

13 At commercial scale, 35 jobs are estimated along with
14 \$103 million in capital investment, and these would be required
15 to first and fully comply with the terms of the Grant Agreement.
16 Approximately half of the Tobacco Commission funding would be
17 used for personnel, with lesser amounts spread across all budget
18 categories.

19 Private investment is shown as \$1,200,000 in cash
20 with an additional \$2,760,000 of in-kind contributing,
21 contributions rather, from the parent company. As has been the
22 case with previous applications, the Foundation would be an
23 equity partner in this initiative, and an informal line of equity
24 and/or convertible debt to the company, would be held by the
25 foundation, with any investment terms to be used by the

1 Foundation of future projects. Staff believes that all such
2 agreements should be reviewed by Commission counsel prior to
3 execution.

4 Finally, in terms of background, the timeline
5 anticipates project completion Quarter 1, 2015. The milestones
6 and deliverables are clear and measurable. Given that neither of
7 the first two awards has been fully disbursed, the original grant is
8 nearly 90 percent disbursed, but more than 60 percent of the
9 Phase 2 grant remains undisbursed, and that the most recent
10 award in January of 2012 did not receive a review by the VEDP
11 vetting group. Staff recommends referral to VEDP for vetting.

12 A recap on the science side, the strengths, can they
13 produce samples of acceptable quality for customer
14 demonstration? Weaknesses, behind schedule on several
15 milestones, Phase 1 and 2, and there are some factors outside of
16 the company's control. The design of the pilot plan was quite
17 honestly very vague and the majority of the opinion of the team
18 leaders.

19 The economic liability process remains risky until
20 demonstrated by the pilot in its successful fashion.

21 On the commercialization side, strengths, the
22 management team has had successful discussions with several
23 potential customers/partners across multiple markets. Supply
24 agreement for feedstock and have a strong technical sales team
25 in the opinion of the team leaders and strong potential benefits.

1 Weaknesses, the lack of product focus, means
2 specifically where are you going after first and second and third,
3 which is creating indecisiveness to the business plan and risks
4 associated with energy costs and production.

5 Madam Chairman, that represents my report on
6 Round 10 of the vetting process. I'll be happy to entertain any
7 questions from the R&D Committee or yourself.

8 DELEGATE BYRON: Once again, I want to thank you
9 and your team for the hard work that you do and going through
10 all this and explaining it, so thank you very much. I'm sure we
11 have some questions, first, we'll start, I believe the questions
12 specifically to Mr. Giles, and then we can certainly ask any
13 applicants that are here.

14 DELEGATE MARSHALL: Jerry, on Application 2828,
15 under strengths, commercialization, the fourth bullet point, you
16 have profit-sharing models seems innovated, could you explain
17 that a little bit, please.

18 MR. GILES: I'm not sure I'll get all the nuts and bolts
19 in the right connectivity. Basically, it's the model where the
20 company would not be the only beneficiary in the profit margin,
21 and that would be shared with the owner of that particular site,
22 that particular facility, as well. There's a potential, I guess the
23 best way to explain it is simply is potential win-win for both the
24 owner of the property, as well as the supplier of the technology.

25 MR. PFOHL: As a footnote, that would be the owner

1 of the facility, would be the owner of the coal processing facility
2 where the HHS technology is set up. So, HHS, the private
3 beneficiary here on the coal processing facility locating their unit
4 would share the profits.

5 DELEGATE BYRON: Jerry, I wanted to also ask, there
6 seems to be a continuing theme on some of these, and in
7 particular, the new applications before us, matching funds not
8 being available or recognized when the applicant puts their
9 application before us. Is there anything you can identify that
10 seems to be an issue, that come forward without any money
11 already in place?

12 MR. GILES: Madam Chair, this is going to sound like a
13 pass-the-buck response. When the application comes in through
14 your portal, before we ever see anything about the project at all,
15 one of the items that the Tobacco Commission staff looks at is do
16 they meet the matching requirements of the program guidelines.
17 If that matching requirement is not currently in their pocket or
18 bank account, is there explanation for how they plan to get there
19 reasonable in terms of moving forward, should it otherwise be
20 viewed as one that you want to spend the time and effort and
21 money to send through this process.

22 We do have, do due diligence review of any process
23 and don't really attempt to look behind at matching fund curtain,
24 if you will. If what is being proposed seems to be far-fetched or
25 totally unreasonable, we would comment accordingly and in the

1 appropriate terminology. But, otherwise, we're not challenging
2 the applicant team's declaration that they've got investors lined
3 up and they'll be here within 60 days with the money and share
4 that with you and the staff to get some clarity.

5 DELEGATE BYRON: I think it's important to note to
6 the members that nothing has really changed or been reviewed
7 in that regard since the original application and that you're
8 looking at other things, and not specifically updating what the
9 funds are or are not available.

10 MR. GILES: We do not attempt to plow new ground in
11 that particular state.

12 DELEGATE BYRON: Deputy Secretary Carter.

13 DEPUTY SECRETARY CARTER: I believe that we've
14 had this discussion off and on over the years about whether or
15 not you want first, and I realize maybe instead of putting the
16 onus on the Committee as looking at commercialization, maybe
17 we should have the staff possibly come up with some criteria to
18 verify the matching funds.

19 MR. PFOHL: The process to date has been that Grant
20 Agreement gives the applicant 180 days from the date of
21 approval to provide evidence that they've got the matching
22 funds. We have taken the approach that we won't release any
23 Commission funds until we see evidence of getting matching
24 funds, and that's still a challenge.

25 DEPUTY SECRETARY CARTER: Do you feel like that,

1 that process could be improved?

2 MR. PFOHL: I think there's always room for
3 improvement, yes.

4 DEPUTY SECRETARY CARTER: Is there something the
5 Tobacco Commissioners could do to help you with that? This is
6 truly a very important part I think that we need to talk about,
7 that we aren't the ones who are always giving out the money
8 first, and making sure that matching funds are available and
9 maybe verify that fact.

10 MR. PFOHL: I'm going to toss this hand grenade out
11 there and not having discussed it with the Committee members
12 and staff, but I think the nuclear option is that the Committee
13 could take and hold the proposal until matching funds are or that
14 proof is provided.

15 DELEGATE BYRON: Delegate Marshall.

16 DELEGATE MARSHALL: But, Tim, did you not say that
17 no funds go out until they have proved to the staff that they
18 have matching funds?

19 MR. PFOHL: Yes.

20 DELEGATE BYRON: Senator Ruff.

21 SENATOR RUFF: I think that Mary Rae and I feel the
22 same way, which is you've got to have some commitments when
23 the application comes in rather than saying 170 or 180 days after
24 vetting. I think we'd be far better, I think, to say a certain
25 percentage would have to be in hand before accepting the

1 application.

2 DELEGATE BYRON: And I would say when you start
3 saying no, that that message will get out very quickly.

4 MR. GILES: I'm not sure I have the authority, but the
5 folks we happen to deal with, there's certainly a possibility that
6 the management team and the R&D team are not tied to a
7 particular application, informs an outside investor, be it a
8 corporate investor, be it a venture investor, or be it an angel
9 investor, that we're going to be applying for one of these grants
10 which otherwise meet the criteria for the program to be
11 considered, and it may be that the applicant even explains to
12 those outside, or if we're successful in winning the award or
13 winning the right to negotiating the Grant Agreement, is what it
14 amounts to, then you're going to be asked to produce evidence
15 of your intent and commitment to support the project, as well.
16 So, I do think you get into a chicken or egg scenario. I think if
17 you have a hard and fast requirement that says show me the
18 money, show me the bank deposit, the cash in the bank before
19 we will even consider your application. That's a pretty high bar
20 to get over. That would be my recommendation.

21 I think there are probably some applicant team sitting
22 behind me that would have a similar point of view.

23 DELEGATE BYRON: Senator Smith.

24 SENATOR SMITH: When you say that's a high bar, tell
25 us where that mid-level bar would be.

1 MR. GILES: I think it's time to establish, and I guess
2 this would be a staff review stage of the process. Establish an
3 identification of who you plan to talk to, are you going to be
4 talking to the Giles -- fund, have you already started those
5 conversations, and have you been able to make a pitch to them,
6 et cetera, et cetera? So, at least identify sources. To just say
7 we're going to get lucky, you know, somebody is going to match
8 funds, I've been to the rodeo before, and they would say you've
9 got to tell me more than that. I can't, I can't just accept that.

10 If you identify under a confidentiality agreement
11 parameter and I'm talking to these outside equity sources, even
12 though you may not have their binding contractual commitment
13 in your hand at the time Tim has to make his recommendation,
14 send for vetting or don't send for vetting, at least you've done a
15 reasonable amount of stewardship, and that would be my point
16 of view.

17 DEPUTY SECRETARY CARTER: I certainly like what
18 Senator Ruff said, looking at a percentage of money that's
19 available. I think that what we need to start looking at, is that
20 we need to decide are we going to be the first person that funds,
21 or do you believe we need to have a commitment from, be it
22 Venture Capital, Angel funding, whatever, and I just think that
23 verify these matching funds, that if we could look at, if it's just
24 five percent, you know, be a certain percentage of money
25 already there to help, and I think that would help. It just shows

1 that you are committed.

2 DELEGATE BYRON: Well, and I may be out of turn
3 here, but I think from our discussions from day one, starting with
4 R&D, we knew it was a different type of economic development
5 that we're looking at, that it carries a lot of risk with it, and the
6 applications coming forward, it makes sense to me that some of
7 the investors, you know, while they might be willing and ready,
8 are not ready without a commitment from other people, just like
9 we have that same kind of commitment when we have other
10 applications going for federal grant money and other things that
11 are available to them, as well.

12 So, but I believe the commitment should be there and
13 not just be willy-nilly and that they should have put their effort
14 into getting them before they come to us and not after they
15 come to us. But if you're really serious about your project, you
16 should already be out talking to investors and creating that
17 support for your project.

18 DELEGATE MARSHALL: So the question is if we're
19 going to turn down this road and change direction, and so if an
20 applicant came to us and said that I have someone that's going
21 to invest if the Tobacco Commission puts the money up, is that
22 good enough or not? I've got to think the process currently is
23 working with staff saying you can't get the money until you have
24 private investment. Being the first as far as investment, I think
25 maybe that's what business we're in right now, is trying to

1 attract those companies to us, and I think this is Round Ten.
2 And I heard Tim say about how many applications we already
3 had before us, so I don't know if that's not working right now.

4 MR. GILES: I would also point out that given the fact
5 that one of your program requirements is the -- concept and
6 given the fact that that's the first toll gate that you have to get
7 through, that means that somebody has already spent some
8 money somewhere and they paid for time and effort and they've
9 gotten time or money to pay for equipment, to pay for human
10 resources and aspiration. I've never seen anything that we've
11 dealt with where it was, you know, in the embryonic stage, there
12 was no science had been done, there was no investment by a
13 federal foundation or by a university or by a private other
14 company or something. Somebody has already put money into
15 the deal, it's not that you are the first dollar in for everything. I
16 couldn't understand that logic.

17 DEPUTY SECRETARY CARTER: If somebody else has
18 already put money in, why would it be difficult for them to be
19 able to get people to invest other than us?

20 MR. GILES: Any investor I would think including the
21 Tobacco Commission, I won't say I would think, I know that any
22 investor will basically say I have 25 marbles in my bag, do I want
23 to put all 24 of those marbles in one game and I only have one
24 left over? You do the same thing when you're talking to your
25 financial advisors or doing your family budget and deciding

1 whether to buy that new multi-million dollar mansion. It's just
2 human nature.

3 I think it's fine to have a conservative discipline,
4 somebody might call it a hard line approach, but I think we have
5 to understand that if you are an angel investor, or I'm an angel
6 investor, and you can swallow writing a check for \$100,000, your
7 life savings, would you automatically be willing to write the
8 second or third or fourth? You're going to have a threshold of
9 pain because the risks have not materially improved or the sky is
10 not glowing with sunshine, or you're saying I've only got 25
11 marbles, and you've already got 22 of them and you're not
12 getting any more. I think that's the way it works.

13 SENATOR SMITH: This question is for anybody in the
14 room. Is there a shortage of proposals coming to us, that is if
15 we raise this bar somewhat, will we be without investors?

16 DELEGATE BYRON: No, we can have a bar model
17 where you have a certain level and you're going to just eliminate
18 any other option or it's going to be different in the project or they
19 know they've got your back when it's right, or you can just vote
20 no on heading to the vetting process. Maybe we should take a
21 closer look at applicants and you can ask questions. Maybe that
22 would resolve some of your concerns and maybe it'll hopefully
23 help you make your decision.

24 MS. THOMAS: Madam Chair, while we're on this
25 subject, another thing I'd like us to consider any of the proposals

1 we get have in kind and their part in the profit investment. And I
2 think we need a better clarification of what we're going to accept
3 in that, because we could very easily get inflated numbers. I
4 think we need a better clarification of that and what we're going
5 to accept.

6 DELEGATE BYRON: Delegate Marshall.

7 DELEGATE MARSHALL: If we're going to move on, I'd
8 like to ask a question on the application at the appropriate time.

9 DEPUTY SECRETARY CARTER: If I may ask one last
10 question. Jerry, one of the things I noticed with the applications
11 we've just gone over, is the business plan portion sufficient
12 enough? I'll be very candid with you, I'm not quite sure what
13 that is. But what I've noticed is that most of this -- we'd like to
14 see. I've got some concerns about that because certainly one of
15 the things we want to do obviously is help these companies get
16 to commercialization. If they have a strong business plan or
17 commitment and if they don't get a good score on the business
18 side, I think that's important. I've had an opportunity to visit
19 some of the companies that we have funded.

20 And one of the common themes that I'm finding in
21 this process is that they do well getting in their technical people
22 in the scientific side of things, but having difficulty on the
23 business side. And I'm just wondering if maybe the Committee
24 would want to look at that a little closer. And Tim and I had a
25 discussion about this yesterday to see if maybe there is some

1 way we can bring in partners to help with that.

2 MR. GILES: The business plan quality in the vetting
3 process is not a metric we've recommended to you. That
4 highway would not float the other direction. The more important
5 elements are the five science and five commercialization
6 question, but you can write an absolutely beautiful business plan,
7 but if you can't get the right score on the other ten, it doesn't
8 matter, it doesn't matter.

9 So, I would encourage you to look more, if you're
10 worried about the commercial side, look at the five scoring
11 elements and the questions they attempt to ask. And you will
12 see, maybe not in the group that I went through today, but we
13 had made comments, we had made observations about the
14 review panel, team leaders wrote in that they need to be, at
15 management skill sets in a particular aspect, maybe you've got a
16 great science team, but, gosh, you've got to have some sales
17 people, you've got to have people that know how to make rain,
18 not just create rain, but how to sell it. I would encourage you
19 not to put too much weight on the eleventh element from the
20 secret sauce, so to speak.

21 DR. PILLION: Do you have any idea how much it
22 would cost to vet one of these applications, average cost to vet
23 one application?

24 MR. PFOHL: Jerry, do you recall that figure, \$5,000?

25 MR. GILES: I've paid all the invoices that I've

1 received to date for each round that we processed, and still
2 waiting for invoices from one of the universities, but I would
3 venture to say that the total cost for round ten is somewhere
4 between \$70,000 and \$80,000 divided by five.

5 DELEGATE MARSHALL: Madam Chair, along those
6 same lines if we had one application, it would cost 70,000 for one
7 application? You still have to bring everybody in for the
8 application, so it wouldn't cost \$5,000, would it.

9 MR. GILES: Well, we basically ask for an agreement
10 with the Commission, we basically pay the subject matter
11 experts \$250 per hour. They document that review time. If you
12 have one application, it's going to cost a hell of lot less than if
13 you've got, as you're proposing for the next round seven or
14 eight.

15 DELEGATE MARSHALL: So the majority of expenses
16 would be reviewed before they have the actual meeting in
17 Richmond?

18 MR. GILES: Yes.

19 MR. HAMLET: This has to do with jobs, so do you
20 have a sense for, if the facility, pilot facility works, this ultimately
21 goes to commercialization, that the coal processing plants when
22 this entity sets up this operation of these processing plants, how
23 many employees would be there at each facility?

24 MR. GILES: I'm not avoiding your question, and I'll be
25 very honest, and I don't recall whether or not that number was

1 forecast in the application, but you're talking about the first
2 application?

3 MR. HAMLETT: Yes.

4 MR. GILES: You're saying for pilot purposes five, and
5 if you go into full production, is it more than five, the same five,
6 is it less than five, I don't recall that. Maybe the representative
7 would know.

8 DELEGATE BYRON: We'll let Jerry have a break and
9 we'll start hearing from some of the applicants who can answer
10 those questions.

11 Any other questions for Jerry? Thank you very much.
12 If we have any additional questions, you're not leaving, right?

13 MR. GILES: No, no, I'm fine. My pleasure.

14 DELEGATE BYRON: Thank you.

15 Delegate Marshall.

16 DELEGATE MARSHALL: Application 2833. It appears
17 that 2833 and it says previous awards total of \$7 million, so
18 that's two different awards. When I look at the bottom
19 paragraph, it says the original grant was only 90 percent
20 distributed, and Phase 2 is 60 percent distributed. So, I just
21 wanted to know, and still on paper, we have appropriated a
22 certain amount of money.

23 MR. PFOHL: Those numbers were as of December
24 when the report was written. They have continuously drawn
25 down funds on a quarterly basis.

1 Sara Williams, I don't know if you have anything to
2 add to that.

3 MS. WILLIAMS: You may be able to answer it, but I
4 do know that some, they've been working on their facility in Wise
5 County, but at the time this application would have come
6 through, there would still be some construction costs and
7 equipment purchases and things that hadn't been made that
8 would have drawn down, but I don't know exactly what the
9 balance is, but at least there's --

10 MR. RODGERS: On behalf of the foundation, at this
11 point, they're probably closer to 95 or 100 percent on the first
12 one and closer to 80 percent on the second one.

13 DELEGATE MARSHALL: Do you know about how much
14 money is still owed?

15 MR. ROGERS: Probably around 200,000 or around
16 that number. The first one, which I believe is committed, lack of
17 retainage. You've got some work done, maybe ten percent
18 retainage held back. The same kind of situation with the second
19 one. Maybe the second one in the area of a million dollars.
20 Funds spent are unreimbursed largely committed.

21 MS. THOMAS: It says here in the application at
22 commercial scale 35 jobs were estimated, 103 million capital
23 investment. If we grant this, it will be \$9 million.

24 MR. RODGERS: Yes.

25 MS. THOMAS: For 35 jobs.

1 MR. RODGERS: Actually, the 35 jobs are, the
2 company is way ahead in job creation, 35 jobs now. Thirty-five
3 jobs is at the pilot facility. On a full-scale facility, it would be
4 more like 80 to 100 jobs. I'll say they're already in serious
5 discussion with the supplier of the waste wood material they
6 need that's in the Wise County region and already begun
7 discussions for the full scale facility which was promised at the
8 very beginning, that was a requirement of this project. They are
9 committed to building a full-scale facility, they are far along in
10 that.

11 DELEGATE MARSHALL: Ed, under science and the
12 weakness, behind schedule, and the second one says the design
13 of the pilot plan was vague.

14 MR. RODGERS: I'm kind of vague why that comment
15 was made. Mary Carter has been to the pilot plant, a 96,000
16 square foot facility, and every time you go, there's more that's
17 been done. It's a highly detailed design this Committee would
18 ever have seen. Very well done.

19 DELEGATE MARSHALL: Under commercialization
20 weaknesses, lack of product focus is creating a conciseness in the
21 business plan and risks associated with the union costs in the
22 budget.

23 MR. RODGERS: This company has very little to do
24 with the coal business, and this company has a good counter
25 balance through the coal business, and their product is wood.

1 These are products that can be made from, and they can direct
2 what they do into the areas that the downstream customers are
3 going to want. They're having discussions with the Eastman
4 Chemicals, others at this point. At this point, they haven't
5 decided which one is going to be the highest value.

6 DELEGATE BYRON: Thank you very much. Any other
7 questions on applications?

8 DELEGATE MARSHALL: Application 2831. This is the
9 UVA project.

10 MR. PFOHL: Would you introduce yourself for the
11 record.

12 MR. SLUTZKY: I'm David Slutzky, a research
13 associate professor at UVA, and I'm spending all of my time right
14 now on this project. This is John Wheeler, one of my partners.

15 DELEGATE MARSHALL: Maybe you could speak to us
16 about the science weaknesses from the vetting process and then
17 also commercialization.

18 MR. SLUTZKY: I appreciate being here very much and
19 discussing it with you, Delegate Marshall, but as a preparatory
20 comment, I think the vetting process is excellent, but it has some
21 disadvantages. There were a lot of questions that the vetting
22 panel handed to us in writing in anticipation of our 45-minute
23 session in Richmond about a month or so ago. We developed a
24 comprehensive response, eight pages of here's the question and
25 here's our thoughts and responses and here's some additional

1 material, as well.

2 In the current vetting process, there's no way for
3 those materials to be provided for folks in the vetting process. A
4 number of comments reflect a state of understanding at the time
5 they asked the initial question, and other than that 45 minutes,
6 there's really no mechanism for getting back.

7 I'll go through quickly the weaknesses and there's one
8 other comment. We've already raised \$2.8 million in actual cash
9 in the account and we spent a little of it, and we had some
10 additional contributions that will be coming our way, but our
11 legitimate in-kind contributions.

12 Specifically, on the science side, there were three
13 comments that were on the negative side. The proposal was
14 unclear as to whether developing the vehicles and the grid
15 technology and the research center. Obviously, we could have
16 done a better job articulating things in this particular business
17 plan. We were very specific doing a vehicle-to-grid system
18 development. We used the RG facilities to perfect our vehicle-to-
19 grid system, and there's a lot of components out there right now
20 in the marketplace, and we're going to try to bring them
21 together. They were going to manufacture some of that
22 componentry at the facility in Danville, and that's where the
23 larger number of jobs come from in the application.

24 There's a vehicle involved, and when we applied for
25 the grant a year ago, we were applying for grant money to

1 support the development of that vehicle. And in the interim, we
2 actually found a manufacturing partner, and they're fully funding
3 the development of that vehicle with the various technologies.
4 It's an important vehicle to have in our business plan because
5 we're going to be able to leverage that and get substantial
6 market penetration. We're not going to depend upon that
7 vehicle, we're not responsible for developing it.

8 The second weakness identified was the observation,
9 University of Delaware, the vehicle-to-grid project, and that's
10 true. What they've done is put together a couple of fundamental
11 pieces and engaged in commerce with the grid operator, Mid-
12 Atlantic, the same grid operator that we'll be dealing with down
13 in Danville to generate revenues using vehicles. The University
14 of Delaware's project does not completely distance from us
15 because the vehicle itself is from our partner EB Grid. Tom Gage
16 is head of the EB Grid, made those vehicles when he was
17 president of BM Propulsion, and he has a number of other
18 vehicles that were not used through the University of Delaware
19 project. The battery pack will be used in our Danville facility.

20 The fundamental comment on that is that the
21 University of Delaware is not commercializing that, but we are
22 going to commercialize it, and Delaware bought an R&D facility,
23 but we are going to commercialize our R&D, and that's one of the
24 fundamental differences.

25 DELEGATE MARSHALL: If I can interrupt you, can you

1 briefly explain vehicle-to-grid?

2 MR. SLUTZKY: A very good question, and we should
3 have done that before today. The simple idea is this. You have
4 a battery in a vehicle, and that battery currently reserves the
5 logistic function or whatever that vehicle requires. It makes it
6 possible for that vehicle to move around, particularly in the case
7 of delivery vans, spends a lot of time sitting there and the
8 battery isn't doing anything.

9 The grid has the need for electrons for quick response
10 all day long. For example, if 2000 customers turned on their
11 HVAC system, Dominion has to crank up their coal plant or nuke
12 plant to satisfy that demand. And they can't crank up those big
13 systems in a timely fashion, so what they do is they create a
14 market where they buy extra electrons, outside sources, to just
15 to flatten out the curve of need throughout the day. They also,
16 they have extra electrons they need to get rid of at certain times,
17 and 2000 customers turned off their HVAC system, they can't
18 ramp it down.

19 The developed market is already in place where
20 participants can bid in and say we have the ability to offer you
21 electrons, take them away, you can pay us for being available,
22 and pay us again if you actually take electrons, or give them to
23 us. That is an existing marketplace, and a lot of people are doing
24 that with different forms of energy, and a lot of it is being done
25 with batteries. We had the idea if you take those batteries that

1 are sitting idle, in delivery vehicle fleets, in particular, and you
2 connect them to the grid just as people are currently doing with
3 battery systems, you can engage in commerce.

4 So, vehicle-to-grid is a pretty complicated technology,
5 and there are markets that are not well known, but they exist.
6 That's the challenge for everybody that break it down and make
7 it understandable, vehicle-to-grid. There are a number of
8 different markets.

9 The third weakness for the science side and saying
10 most vehicle manufacturers do not embrace vehicle-to-grid
11 technology due to concerns about the impact, battery life and
12 warranty. I would love to have had an opportunity to get into
13 that with the panel during our 45-minute session. We had one of
14 our members on the team in the room at that time, and he was
15 head of the Chevy Volt program for 32 years, and later the CEO
16 of FISKER, its last year of existence.

17 Tony understands the OEM culture, and the reason he
18 has joined our advisory board and is actively engaged with us is
19 because he thinks the OEMs are very interested in vehicle-to-grid
20 and gained introduction to the folks at GM, and he's trying to
21 broker some action between us and other OEMs. The suggestion
22 by the vetting panel that OEMs are not interested, is not our
23 experience at all.

24 There was an article that, a Morgan Stanley article,
25 which I shared with a couple of people here, and they had a

1 study which came out, I think, when we were doing our vetting,
2 the tests involving vehicle-to-grid, will absolutely transform the
3 grid. The day after the Morgan Stanley piece came out, that
4 stock went up ten percent. There's a very strong reason why the
5 OEMs would be interested.

6 The panel did not have an opportunity to get feedback
7 from us, and I don't believe they understood that point.

8 On the business side, there was a couple of other
9 matrix, and the first one was is it is not unrelated to the third
10 one, which, or some concern about unrecognized assessment
11 capital needs. I think the vetting folks again looked at our
12 vetting proposal from last year and compared it to our vehicle-to-
13 grid project for this year.

14 Last year, we were not only going to need to raise the
15 \$19 million to develop the vehicle itself, but we had to raise
16 money to build a factory, that's no longer on our plate. Our
17 manufacturing partner is responsible for development of the
18 vehicle, and it turns out that Yamaha in November, that they're
19 going to produce a factory, build vehicles using the same vehicle
20 platform. It'll be announced later this year, the fourth largest
21 automotive manufacturer in the world is also going to be
22 producing vehicles using that technology.

23 Our manufacturing partner doesn't actually have to
24 build a factory necessarily because they'll have contract
25 manufacturing. So a lot of those capital lists that the vetting

1 process was struggling with are not a problem for our proposal at
2 this time.

3 The other two comments that were made in this
4 category was that market and the vehicle-to-grid technology
5 platform is difficult to predict with any timeline certainty. There
6 were two people in the vetting room who said this is 20 years
7 away, and I don't understand their viewpoint considering that in
8 Delaware they're engaging in commerce today and their final
9 project, and in just one market using vehicle-to-grid.

10 Based on the Morgan Stanley article, you can tell
11 there are some, a lot of market interest there. The last
12 weakness identified says no full-time team in place, and John and
13 I are working full-time and well over 40 hours a week on this
14 project.

15 In addition to having the two of us, we have Tom
16 Gage and his staff working full-time on the development of our
17 vehicle-to-grid technology. I know we have a good management
18 team. John has an MBA from the University of Virginia and four
19 years on Wall Street experience, mergers and acquisitions. While
20 I'm officially a research professor at the University of Virginia,
21 I'm a serial entrepreneur. I started several different businesses,
22 have a consulting firm in Charlottesville right now, and I started
23 that, and started the Environmental Due Diligence back in the
24 1980s, so I'm an experienced business person, as well.
25 Hopefully, that's an adequate and quick answer to your question.

1 DELEGATE MARSHALL: Also, David, it says that 147
2 direct manufacturing jobs in your project. So, they are in the
3 footprint, and what jobs are you talking about?

4 MR. SLUTZKY: We're going to have a small number of
5 R&D jobs at our Danville Research facility. What we intend to do
6 during the next two years is develop the componentry for our
7 vehicle-to-grid system. What we're focused on right now is the
8 battery pack, and we have started to work on the design, but we
9 want to use some of this investment to fill out the battery
10 technology.

11 In addition to that, we are going to be working with a
12 bi-directional charger that we think to augment an existing one
13 that is in the marketplace for our bi-directional purposes. There
14 are other pieces, but those are the main ones.

15 By the time this R&D cycle is over with, which should
16 be a little more than two years, we'll be ready to manufacture in
17 the Danville facility however many of these we can put into the
18 marketplace. Our expectation is that by 2017, we'll have our
19 manufacturing partner's vehicle in the marketplace, and we're
20 not going to wait for that, because we're working on and we'll
21 also be doing bi-directional commerce. We're also initiating
22 discussions with major automotive manufacturers to put our
23 vehicle-to-grid capabilities in their electric vehicles so their
24 customers can work in the grid, as well.

25 The jobs in Danville, and we came up with that

1 number because we asked Tom Gage to develop it. Tom, for ten
2 years, was the president and CEO of AC Propulsion, and they
3 made electric drive trains and made the initial drive train for the
4 Tesler. He knows what it takes to manufacture electrical
5 components for vehicles. That's why we went to him, and he
6 mapped out some specific jobs and they're virtually all in the
7 manufacturing end of it. He mapped them out based on what we
8 thought our level of commerce would be for each of the years of
9 the cycle of our vehicle. And that's where the number 27 jobs
10 comes from. I wanted a number since I'm going to have to live
11 with it, and we thought we could.

12 None of those jobs relate to the manufacturing
13 vehicle. It's possible that if that vehicle was manufactured in
14 Virginia, there would be a large number of additional jobs, but
15 we didn't go there with this application. We don't know if that
16 will happen.

17 SENATOR RUFF: What is your request from the
18 Tobacco Commission?

19 MR. SLUTZKY: We've asked for \$2 million of funding.

20 SENATOR RUFF: You have raised 2.8?

21 MR. SLUTZKY: 2.8 is what we've raised.

22 SENATOR RUFF: You're talking about spending a
23 million dollars in Danville?

24 MR. SLUTZKY: No, we're planning on spending the \$2
25 million of your money in Danville, and then our match money,

1 the million dollars at least of our money also being spent in
2 Danville, and most of that money is going to be spent on
3 employment activities and some materials, we'll purchase them
4 from local supply chains. Some of the match may end up being
5 in the form of contributing batteries. We can't commit to a
6 hundred percent of the match, but we'll certainly be at three
7 million of our four million dollars, can be spent in the Tobacco
8 Commission, most of it on jobs.

9 SENATOR RUFF: You concern me a little bit when you
10 said Tom Gage, I mean he's kind of faded out of Virginia? How
11 fluid are your placement of these jobs?

12 MR. SLUTZKY: A hundred percent commitment to do
13 it in Danville. He doesn't want to do the R&D facility in California
14 because of the employment environment, it's just optimal in his
15 words. Danville is a very good location because our analysis of
16 the marketplace, a worker there can be trained to what they
17 need to do, and they need the jobs, and there's a certain culture
18 of hard work that exists in Southside Virginia, and we expect to
19 cap that.

20 The specific reference to Tom is that he's a California
21 resident, but he'll be a joint venture partner with us at the very
22 least on the project in Danville, but he won't move to Danville.
23 He's identified a project manager, that person will move to
24 Danville and be in charge of the project.

25 SENATOR RUFF: As far as the organization, you're

1 going to be based in Charlottesville?

2 MR. SLUTZKY: Basically, John and I in Charlottesville,
3 and most of our investors in Charlottesville. With this grant, we'll
4 make the commitment to our entire activity from the Danville
5 facility. Once we're done with that, we intend to manufacture
6 componentry for our vehicle-to-grid system at the Danville
7 facility.

8 SENATOR RUFF: Would you repeat again the number
9 of jobs.

10 MR. SLUTZKY: Based on Tom's calculations, we
11 expect comfortably 127 jobs, which is the initial ten R&D jobs,
12 and then manufacturing jobs the first couple of years for the
13 manufacturing of the componentry. If this catches on, like we
14 hope, the skeptics in the vetting process, believe will happen at
15 some point. There's going to be larger employment
16 opportunities, and if we're down there, there's no reason why
17 we'd want to move and a good place to have a workforce.

18 SENATOR SMITH: Madam Chair.

19 DELEGATE BYRON: Senator Smith.

20 SENATOR SMITH: Can you give me examples of
21 vehicles that would be used, and it seems like most of the
22 vehicle, whatever vehicles, whatever type, the maximum use
23 there coincides with the typical higher demand of the grid? What
24 are the vehicles that are counter to that?

25 MR. SLUTZKY: I'm glad you asked that question.

1 That's a natural first impression. The grid commerce we're
2 talking about is not a peak, it's all day long. What a utility has to
3 do is match the demand so there are challenges that at any time
4 of the day or night they still have a disconnect in the amount of
5 electrons they're pumping out of there to the facilities and the
6 demand that's going up and down. So they look for immediate
7 response electron sources, and they engage in commerce with
8 us.

9 The frequency regulation market, the project that the
10 University of Delaware operates all day long, is constant. One of
11 the reasons we were interested in fleet vehicles is because, and
12 you can get a large number of them under control in our network
13 initially. If you went out and bought a vehicle and wanted to
14 connect it to the grid, you couldn't bid in this market today,
15 because until recently, the minimum bid is megawatt. If we can
16 get a critical mass from our fleet vehicles up and running, then
17 we can accept all the OEMs and customers into our network
18 because their job is a marginal increase. That's why we want to
19 go out to scale, to be able to give vehicle-to-grid services to
20 everyone that has an electric vehicle. Does that answer your
21 question?

22 SENATOR SMITH: Madam Chair, if my vehicles is in
23 my garage, and it's -- then if it's not, it's not connected. So I'm
24 saying you're dependent on the inefficiency of the owner of the
25 vehicle by not using it.

1 MR. SLUTZKY: Excellent question. One of the
2 challenges that a number of others have identified in the vehicle-
3 to-grid early commercial, how do you get that critical mass of
4 assets, battery assets in the system reliably? That's why we
5 went to the fleet operators. If you had the largest fleet in the
6 world, the U.S. Postal Service, if they had 146,000 of them, and I
7 can tell you they all would be plugged in, in the charger, for at
8 least 16 hours a day, because they don't have a duty cycle other
9 than during the eight hours or so of regular day-time operation.

10 The appeal of the fleet is exactly that. I went to the
11 City of Charlottesville fleet manager recently and said you have a
12 certain portion of your several hundred vehicles that are being
13 used by building inspectors and some like that. How many hours
14 a day are those in use and how predictable is the duty cycle?
15 After a little calculation, they said probably two to three hours
16 away from the base five days a week. We still need to have a
17 vehicle, and we have to have them available for inspection. So,
18 he said that's it. A lot of vehicles in the fleet during business day
19 hours still to be able to be hooked up, and a certain percentage
20 of other vehicles would be predictably hooked up, and we don't
21 always know which ones, but the vast majority of the fleet will be
22 available with nonbusiness hours. What we'll do is bid into those,
23 into the frequency regulation and other grid-related markets at
24 the scale we know from delivery a given time of day, so you can
25 bid in different time charges.

1 SENATOR SMITH: My vehicle is on the grid quite a
2 bit, but it is in the low charge state anticipating it's a maximum
3 maturing. Does that mean that at one point I could not be
4 charging, it would have to be into neutral? How does that
5 happen?

6 MR. SLUTZKY: Most people don't anticipate the, I've
7 been driving electric vehicles for seven years, and I've got a little
8 experience. My first one was a Ford Ranger pickup truck that
9 they made back in 2000, and you have a 65-mile range. I get
10 real nervous if it's not fully charged and I know I'm going to be
11 driving around for the day. So, it's a legitimate concern.

12 And what I didn't know was that my battery pack, that
13 when my vehicle tells me I'm down to zero rate of charge, I
14 actually have half of my state of charge. They do that to protect
15 the long-term integrity of the battery pack.

16 We're planning on working with the OEMs to get the
17 battery packs a little bit above what they predict the range to be.
18 What happens in grid commerce, you're not taking a discharge
19 off the battery, you're taking a quick blast of it for a short period
20 of time, you're not depleting the battery like this, they'll go down
21 a little bit and back up a little bit, and that's a marginal impact.

22 MR. HAMLET: In some of the materials that we have,
23 it sounds like part of your project is developing a new vehicle, a
24 new drive train, a new battery pack. Isn't there a new partner
25 that does that, and that's part of the proposal, or is that not

1 applicable anymore?

2 MR. SLUTZKY: When we applied last year, we were
3 asking for funds to develop the vehicle, but what we're applying
4 for this time is the funds to develop the vehicle-to-grid
5 component of our business. And I think that was the disconnect
6 between what we wrote and what the vetting group understood.
7 We're not going to develop an entire drive train. Tom Gage could
8 create a new drive train or a new electric motor very easily, but
9 he wouldn't improve on the efficiencies that are available now or
10 any number of electric motor manufacturers, including his own
11 company. The battery cells are made by a number of large
12 companies, but when the cells get brought together, it's the way
13 they operate in conversation with each other that makes them
14 effective or not effective to build logistic functions of the vehicle.
15 So, it's very important to have the connectors and software that
16 manages all of the cells in the pack be optimized through the
17 dual duty cycle that our system will have to serve the logistics
18 function.

19 As I said, we're not going to develop the entire drive
20 train. The battery cells are made by a number of large
21 international companies, but when the cells are brought together,
22 it's the way that they operate in conversation with each other, if
23 you will, that makes them effective or not effective for the
24 logistics function of the vehicle, as well as for the grid activities.
25 It's very important to have the connectors and the

1 communication that manages all of the cells in the pack to be
2 optimized for the dual duty cycle that our system will have to
3 serve. The logistics function with its, and then the frequency
4 regulations for the shower discharges. We're going to develop
5 those portions of the system. We will buy existing
6 manufacturing parts, and we'll connect those different pieces into
7 a system.

8 MR. HAMLET: Is the battery pack compatible with the
9 existing electric or are they retro-fittable?

10 MR. SLUTZKY: Potentially, yes. We can do it with the
11 on-board charger, and we'd have to replace it, or we can do it
12 without the vehicle charger, but we can do a lot of commerce
13 outside of the vehicle, and we intend to do that. We can also do
14 that if there's an OEM who has a vehicle and who can talk to us,
15 but their customers are going to use our system, and we'll be
16 able to have our system still connected to the grid.

17 DELEGATE BYRON: Thank you very much.

18 MR. SLUTZKY: Thank you very much.

19 DELEGATE BYRON: Delegate Marshall.

20 DELEGATE MARSHALL: Madam Chair, I have a
21 motion, unless somebody has a question about the applications.

22 DELEGATE BYRON: Do you want to take them in a
23 block or one at a time?

24 DELEGATE MARSHALL: We can do it in a block or
25 maybe there's a substitute motion. Madam Chair, I make a

1 motion that we fund Application 2828, Application 2830,
2 Application 2831, and Application 2833.

3 DELEGATE BYRON: Do we have a second? All right,
4 we've got a second.

5 DELEGATE MARSHALL: I'll go over those again.
6 2828, Lee County; 2830, Southwest; 2831, and 2833.

7 SENATOR RUFF: I'd ask that we separate.

8 DELEGATE BYRON: Let's get started. 2828, which is
9 the HHS Coal Refining Process, Lee County, I've got a motion and
10 a second.

11 Delegate Marshall, I need you to withdraw your
12 previous motion.

13 DELEGATE MARSHALL: I will.

14 DELEGATE BYRON: Now, we'll take them individually.
15 We have Application 2828, which is Lee County, HHS Coal
16 Refining. Do you want to make a motion, Delegate Marshall?

17 DELEGATE MARSHALL: Madam Chairman, I move
18 that we accept 2828.

19 SENATOR SMITH: Second.

20 DELEGATE BYRON: We have a second. Any
21 discussion? All those in favor, say aye. (Ayes). Opposed? (No
22 response). That is approved.

23 DELEGATE MARSHALL: Madam Chair, I move that we
24 accept Application 2830, Simmons Equipment, Southwest
25 Virginia.

1 MR, PFOHL: Madam Chair, point of information. On
2 the Simmons proposal, last month, the Commission received a
3 Tobacco Region opportunity fund request from Tazewell County
4 for Simmons to create 41 jobs, private capital investment, at
5 \$1.35 million. I want to bring that to your attention to alert you
6 that I believe these are the same job promises in the R&D
7 proposal so we could look at this two ways and we could do it
8 purely through the TROF and do it in a combination of TROF and
9 R&D funds. I suspect the company would argue that they need
10 an R&D fund to get to the job creation.

11 I submit to you maybe this is the ideal situation that
12 we'll have a TROF commitment with clawback provisions for jobs
13 promised in an R&D proposal, but I wanted to bring that to your
14 attention and get the representatives of the Higher Ed
15 Foundation to come speak to that. That's up to them, but I
16 wanted to let you know about the TROF.

17 DELEGATE MARSHALL: I did not know that, so I
18 withdraw my motion.

19 MR. RODGERS: I was unaware of this TROF
20 application, and did not know about it. I would urge you to take
21 up the R&D proposal, and one of the advantages of the R&D
22 funding is that would go in as an investment, and the Foundation
23 would hold on, on behalf of the Tobacco Commission, not just
24 free money.

25 Assuming the R&D proposal is approved, that could

1 affect whether or not you award the TROF funds. The R&D
2 proposal, I believe, is the better proposal to follow through and
3 as an investment.

4 SENATOR RUFF: We already approved the TROF
5 funds, didn't we?

6 MR. PFOHL: Held off approval waiting for this
7 conversation and wanted to bring it to your attention as we
8 talked about it, a separate proposal, but if you want to fast-
9 forward it to a motion, I wanted to make sure you were aware of
10 it.

11 SENATOR RUFF: If you set them side by side for my
12 simple mind, what was the commitment in capital investment
13 from the TROF?

14 MR. PFOHL: One point three five million.

15 SENATOR RUFF: They asked for how much money?

16 MR. PFOHL: Within the TROF formula, it generates
17 135,000 award.

18 SENATOR RUFF: How many jobs?

19 MR. PFOHL: Forty-one jobs.

20 SENATOR RUFF: How much was this one?

21 MR. PFOHL: The application initially suggested 53
22 new jobs, but that figure was revised to 30, with private capital
23 investment at 1.9 million. And we're in the same ball park, but
24 the numbers don't align exactly.

25 SENATOR RUFF: I have faith in the TROF process,

1 and I move we refer this to TROF.

2 MS. THOMAS: Second.

3 MR. RODGERS: If I may, as a reminder, with the R&D
4 proposal, the cost share and the matching funds from the
5 company is a requirement. In addition, the Foundation is very
6 diligent in administering the grants. When the Foundation is
7 involved, as an observer to the board of directors of the
8 company, I did not know about the TROF award, but I'd urge you
9 to move forward with the R&D award, and then work out with the
10 staff which one the company decides to accept. This is scored
11 very highly in this process, I'd point out.

12 MR. PFOHL: This proposal was initially submitted
13 for \$2 million, and through budget provisions, was reduced to
14 \$1.1 million and change. This may be an ideal situation with the
15 R&D investment we already have to the TROF commitment, so
16 that's one lens to look through this.

17 SENATOR RUFF: Madam Chairman, it's identical, and
18 the staff oversee the application, also.

19 MR. HERWOWITZ: I'm Gary Herwowitz with the
20 company. One thing is nobody told us there was as an either/or
21 here. We've been working with you and R&D going on eight
22 months for this. The money is being used for the development
23 for the coal hauler. We were never told anything about a TROF,
24 if it was going to be either/or. Talking about the things we were
25 looking for, this is not where we're trying to go, one way or the

1 other.

2 In R&D, this is what we're submitting, and we're
3 asking you to approve and what I think we've scored well on the
4 panel, if we're going to do something, if it's either/or, we'll
5 withdraw the TROF. This is the core thing of moving forward
6 with developing our program. And I want to be sure we
7 understand each other. We were looking at this for other, we
8 want to be sure this is fundamentally going to be a game
9 changer for coal industry. This is in the spirit of the Tobacco
10 Commission, and it's going to make a huge impact.

11 It was our understanding the TROF money was
12 available to various companies. We're looking at a building
13 expansion, as well, separately from this. I want to be sure here,
14 and maybe we're mixing this up.

15 MR. PFOHL: What is the length of the research thing
16 that you're anticipating in the R&D obligation?

17 MR. HERWOWITZ: At least 18 months.

18 MR. PFOHL: I bring that up because the TROF
19 requires you to hit your job investment in 36 months. My advice
20 would be the 18-month research you're doing is going to eat
21 away at your TROF performance period, so I think your
22 suggestion of withdrawing the TROF, and that can be resubmitted
23 at any future time, but you have a full 36 months before to
24 perform on the TROF, would be an inadvisable approach.

25 MR. RODGERS: I heard them say they wanted to

1 withdraw the TROF and move forward with R&D.

2 DELEGATE MARSHALL: What I understand they want
3 to do now is to fund R&D. At some point down the road, they're
4 going to come back and ask for TROF funds, also?

5 MR. RODGERS: We may or may not.

6 DELEGATE MARSHALL: You will. You didn't even
7 know they were asking for this. Have we done that before? We
8 funded R&D and then do a TROF?

9 MR. PFOHL: I'm not aware of any R&D application in
10 the last four years that have come back and asked for TROF, but
11 I may not have a complete recollection of that, but this is the
12 first.

13 SENATOR CARRICO: My understanding is that they
14 haven't received any TROF dollars, they've been approved, but
15 they haven't received any.

16 MR. PFOHL: We haven't approved the TROF yet,
17 waiting to have this conversation.

18 SENATOR CARRICO: We're here to decide the two
19 proposals?

20 DELEGATE BYRON: This is a policy decision that we
21 should discuss at some point in the future. It's never been used
22 before anyway, and we put out a TROF guideline. Just like
23 anything else where there is money, people will follow, and
24 they'll naturally come to it. The R&Ds are based on in part
25 employment opportunities, as well, then that may need to be

1 separated from the TROF.

2 SENATOR CARRICO: I'd like to make a motion that
3 we approve the R&D and the TROF Committee then can decide
4 later on if they can come back and they already said 18 months
5 of research to be done.

6 DELEGATE MARSHALL: I think Frank had that.

7 DELEGATE BYRON: A substantive motion to approve
8 the R&D applicant. Senator Carrico.

9 MR. HAMLET: I'm going to second.

10 DELEGATE BYRON: Any further discussion? All those
11 in favor approving the application, say aye. (Ayes). Opposed?

12 DELEGATE BYRON: We have four no's.

13 MR. PFOHL: Senator Ruff, Ms. Thomas, and Ms.
14 Carter, and Smith. The motion carries.

15 DELEGATE MARSHALL: Madam Chairman, I move
16 that we approve and accept Application 2831.

17 MR. HAMLET: Second.

18 DELEGATE BYRON: 2831. We have a motion to
19 approve the application, and it's been seconded. Do we have any
20 further discussion. This one has been talked about quite a bit.
21 All those in favor, say aye. (Ayes). Opposed? No, no, no. We
22 have three nos.

23 MR. PFOHL: Carter, Ruff, and Smith. Motion carried.

24 DELEGATE MARSHALL: Next, Madam Chair, I move
25 that we approve Application Number 2833, Southwest Virginia

1 Higher Ed, OptaFuel Project.

2 SENATOR SMITH: Second.

3 DELEGATE BYRON: We have a motion and a second.
4 Any further discussion on that? We talked about this one, too.

5 MR. PFOHL: You will recall the two Southwest Higher
6 Ed proposals of the revenue sharing position where the Higher Ed
7 Foundation has stated that they will use these funds as an
8 investment in the company and put that foundation in a position
9 sharing profit distribution from the company. The Higher Ed
10 Foundation is also, they're willing to consider sharing profit
11 distributions with the Commission, and I don't know if the
12 Committee wants to take a position on that proposal for revenue
13 sharing, perhaps not.

14 DEPUTY SECRETARY CARTER: Actually, I had a
15 question.

16 SENATOR RUFF: Madam Chairman, would you flush
17 that out a little bit, the way you propose that, to handle that.

18 MR. PFOHL: What the Foundation is proposing here,
19 in short, the Foundation is using Commission funds to make
20 equity investment, and these private beneficiary companies
21 would get profit distribution from the companies flowing back to
22 the Foundation to fund their future projects. The Foundation has
23 stated that they are willing to consider sharing or turning profit
24 distributions over to the Committee. And I'll put it to you at this
25 point.

1 MR. RODGERS: The purpose of these type of projects
2 is that not just the Foundation, but overall, the grant goes to the
3 grantee, and the grantee turns the money over to the company
4 pursuant to the agreement, and it goes away, and there's no
5 return coming back to the grantee or the Tobacco Commission.
6 We submit the model we're proposing ought to be for all of the
7 R&D projects, maybe all of the Tobacco Commission projects.
8 And we'll be happy to engage in conversation with you, probably
9 when not everybody is so tired. We think this results in a better
10 position for the company, a lot more accountability, because the
11 company has to give up something in return for the funding
12 coming to the Tobacco Commission.

13 With a foundation, you get a full-time grant
14 administrator, and all she does is administer the grant, full-time
15 with that, and very good. You also have a chief financial officer
16 who oversees the project, Mr. Duffy Carmack is right back here.
17 We oversee the project from the standpoint of being on the
18 board of directors as an observer, and we put a great deal of
19 time into evaluating the companies prior to getting to this point.
20 We put a lot of time and money into this. That's why one of the
21 reasons the return coming back to the Foundation would be
22 equitable. If the Foundation isn't compensated at all, for all the
23 work that's gone into this, you get what you pay for.

24 We're happy to engage in conversation with the staff,
25 and any members or whatever about how to structure the return

1 coming back to the Foundation, return to the Tobacco
2 Commission, what can easily be worked out, and different ways
3 to do it.

4 DELEGATE MARSHALL: I think this is a great idea,
5 and we can talk it out, I don't know if this is the appropriate
6 time, to maybe talk about it at another R&D meeting, or do it
7 now?

8 SENATOR RUFF: Madam Chairman, I would amend
9 the motion to say that negotiation of that return process.

10 SENATOR SMITH: I'll second it.

11 DELEGATE BYRON: Does everyone agree with that?
12 I'll just say that they can make a --

13 SENATOR RUFF: I think the motion needs to be
14 debated and worked out later or with the details to be worked
15 out later.

16 DELEGATE BYRON: Any discussion?

17 MR. MARSHALL: The discussion I was going to have,
18 if I go back and look at projects, and if we had taken this idea
19 the first day, what projects have we improved, it wouldn't even
20 come to the table because of that. One I can think of in
21 Southside is the project for Goodyear, et cetera. They're working
22 two shifts right now, getting ready to go to three, so with that
23 group coming to the table, if we had this idea. Now, I think this
24 is a good idea, but are we going to limit ourselves in the future in
25 trying to create jobs? We're not investors, we're trying to create

1 jobs.

2 SENATOR RUFF: My motion is not to change the
3 policy.

4 MR. HAMLET: Madam Chair, my suggestion is that if
5 we approve funding of the grant, the Tobacco Commission or
6 Foundation after the fact trying to decide what equity percentage
7 would that be if it's already been funded, the horse is out of the
8 barn. I'm not opposed to it in practice, I'm pointing out it's going
9 to be very difficult to determine what that investment gets to in
10 the way of equity if it's already approved.

11 MR. PFOHL: And I would add that if it becomes a
12 multi-year process of tracking profits and if any are being
13 generated, then what percentage, if any, is due to the
14 Commission? I think one of the opportunities here is to let the
15 Foundation handle this and use the proceeds that they receive, if
16 any, there may not be any to fund the operations at their
17 resource center that would help construct for future project
18 applicants. We could turn this back to the Foundation, and that's
19 one of the options available to you, you handle it and keep the
20 proceeds to fund your operations. We can kick the can down the
21 road and we've got two newer proposals with the Higher Ed
22 Foundation that you'll be hearing about, but the same offer is on
23 the table with those, on the two newer proposals at a later date if
24 you choose.

25 DELEGATE BYRON: On your amended motion. Is

1 there a second?

2 DELEGATE MARSHALL: What's the question or what's
3 the motion?

4 SENATOR RUFF: The original motion was to approve
5 the Higher Ed Center Foundation, getting either equity or
6 payback. My amendment would allow staff to negotiate with,
7 reach an equitable share between the Higher Ed Foundation and
8 the Tobacco Commission.

9 DELEGATE BYRON: Any discussion?

10 DEPUTY SECRETARY CARTER: On this application.

11 MR. HAMLET: Just a bit of clarity. The only big
12 difference between the two motions is that the Tobacco
13 Commission is part of this motion, and we're talking about an
14 equity partner.

15 SENATOR RUFF: This is an amendment to the original
16 motion. The amendment is that we would split in some fashion
17 with the Higher Ed Foundation.

18 DELEGATE BYRON: All in favor, say aye. (Ayes).
19 Opposed?

20 SENATOR CARRICO: No.

21 MR. PFOHL: The motion carries, approved as
22 amended.

23 SENATOR RUFF: Point of order on that.

24 MR. PFOHL: The motion to amend carries.

25 DELEGATE BYRON: All in favor on the motion to

1 amend it, say aye. (Ayes). Opposed?

2 MR. PFOHL: Motion to approve. Two no's.

3 DELEGATE BYRON: Any other motions?

4 MR. MARSHALL: That takes care of all them.

5 SENATOR CARRICO: We've got 2832, Bristol
6 Compressors. Madam Chair, I'd make a motion we approve
7 2832, Bristol Compressors. They've been a community leader
8 there in Washington County for some time, and local
9 competition, and they've been a good community citizen, so I
10 make a motion we approve 2832.

11 DELEGATE MARSHALL: I'll second it.

12 MR. PFOHL: Could we ask someone in the, from
13 Washington County, IDA, to address this, to come up to the
14 front.

15 MR. BERRY: My name is Jason Berry, County
16 Administrator.

17 DELEGATE MARSHALL: Good morning, sir. Did you
18 see the information that came from the partnership on your
19 weaknesses and strengths as far as commercialization?

20 MR. BERRY: No, sir, the first time I heard that was
21 this morning. I've never seen it, and I don't believe Bristol
22 Compressors did.

23 MR. PFOHL: Mr. Snodgrass received it, and Mr.
24 Nunnally received it.

25 MR. BERRY: It was never sent to me.

1 MR. PFOHL: They were named on the application.

2 MR. BERRY: I never saw it. They're not here today.
3 The folks from Bristol Compressor couldn't be here today. I came
4 from Northern Virginia to be here, but I could probably address
5 most of your questions if they're not too technical.

6 One of the concerns was on jobs created. The
7 estimate was to be determined, and from my discussions with
8 Kevin, an engineer and vice president of Bristol Compressors,
9 estimating 100 to 150 jobs once the new compressor with the
10 new gases, lower energy gases are at full market.

11 DELEGATE MARSHALL: How long?

12 MR. BERRY: Bristol hopes if things go well, they'll
13 begin testing the new compressor and gas sometime later this
14 year and into next year. If my memory serves me correctly,
15 sometime to market in early 2016.

16 DELEGATE MARSHALL: The jobs will be created in
17 2016?

18 MR. BERRY: There'll be a few for testing, a few new
19 jobs, but the 100 to 150 wouldn't occur until with the new units.
20 The units, just for your information are the, and I'm not a
21 technical person, the compressors that go in ice machines and
22 hotels and things like that. When Johnson Controls bought York
23 International, they spun off that type of compressor, so they're
24 trying to get back in business to compete locally and keep jobs in
25 Southwest Virginia.

1 DELEGATE MARSHALL: Do you know of a date when
2 the 100 or 150 jobs are expected to be available?

3 MR. BERRY: I'd have to ask Bristol, but their estimate
4 is 100 to 150.

5 DELEGATE BYRON: They got some low scores
6 regarding concepts and stage of development, and this is an R&D
7 project, new equipment that they're going to be using in the
8 future?

9 MR. BERRY: It's an international standard to lower
10 the, or more energy efficient gases in compressors, and right
11 now, I'm not the technical person. There's new gases already
12 being used in Europe, and there'll be a new standard to use less.
13 And Bristol Compressors' competitors are overseas already
14 making the compressors with the new gases, so if Bristol doesn't
15 get into that new market, they're going to lose market share in
16 the U.S, but also overseas.

17 One of the biggest markets currently is the Middle
18 East. They'll build compressors in Washington County and send
19 them to the Middle East, and if they're not careful, they'll lose
20 that market because of the European companies.

21 DELEGATE BYRON: Do they have any capability of
22 doing the research, to do research that's needed to get there?

23 MR. BERRY: My understanding is, yes, they have the
24 technical people in place, and they have a facility with excess
25 space that currently is there, and it's just a matter of buying new

1 equipment and spending money on capital improvements. The
2 weakness is the match, but the company is committed matching
3 dollar for dollar if you all approve the \$880,000.

4 DELEGATE MARSHALL: Madam Chair, would it be fair
5 to Bristol Compressors and to us, also, and this has to be
6 approved before a board meeting. My suggestion might be is
7 that we table this until we can have a short meeting before the
8 board meeting and we'll have the board meeting in a few weeks,
9 and then the City of Bristol can meet there and they can answer
10 these questions.

11 MR. BERRY: Delegate Marshall, they're planning to be
12 there already.

13 DELEGATE MARSHALL: So my suggestion is that we
14 have a meeting before the full Commission and then we can be
15 fair to them. Substitute motion is that we table it until when we
16 can meet before the board meeting.

17 SENATOR CARRICO: Madam Chairman, it'll be tabled
18 and then discuss it?

19 DELEGATE BYRON: Yes.

20 SENATOR CARRICO: If we table the motion and bring
21 it up to the full Commission, what's the difference?

22 DELEGATE BYRON: We'll have a special R&D meeting
23 just for this one just prior to the full Commission meeting.

24 SENATOR CARRICO: We would table it today and
25 have a meeting before the full Commission meeting.

1 DELEGATE BYRON: Yes.

2 SENATOR CARRICO: I'll second it.

3 SENATOR RUFF: If the match is there and jobs are
4 there, how would that fit in the TROF category?

5 MR. PFOHL: The application indicated that there
6 would be no new employment and that this would be a job
7 retention strategy of Bristol Compressors, so I think Mr. Berry's
8 statement --

9 DELEGATE BYRON: Sales.

10 MR. PFOHL: I would assume Bristol's sales team
11 would be marketing this new product.

12 SENATOR CARRICO: Yes, I was in a meeting where
13 job retention is the main focus right now, but with new
14 technology developed and the possibility of expanding overseas
15 in the Middle East, that would create an opportunity and not be
16 immediate, but it would create an opportunity, and the facility
17 already has space to expand and could expand to the 150 jobs,
18 but it wouldn't be immediate, and this would be a job retention.
19 By keeping those individuals there and employed, that's the first
20 step and doing the research. That way, I don't think they'd
21 qualify for TROF, because they wouldn't have immediate
22 employees that would be able to meet the TROF. It's going to be
23 based on their marketable sales. This is a long-standing
24 company that's been in Washington County for a long time, and
25 they've competed very well, and now they're trying to get back

1 into the overseas market, which looks promising if they can get
2 this new technology.

3 DELEGATE BYRON: We have a motion to table and a
4 second. All those in favor, say aye. (Ayes). All right.

5 Now, we need to ratchet up a little bit here because
6 we have a meeting at 12:30 in the Executive Committee. We
7 have some new applications before us.

8 MR. PFOHL: Madam Chair, we received eight new
9 R&D proposals in mid-March. We posted a staff report and
10 provided it to you that recommends vetting seven of those eight.
11 I'll note we've changed the format a little bit of our staff report
12 on these new proposals, and we now include several sections of
13 the proposal submitted by the applicant to describe their project
14 improvement section, the R&D opportunity, the proposed R&D,
15 commercial potential, and intellectual foundation.

16 The staff has recommended sending seven of these,
17 with the exception of the Virginia State University proposal,
18 which we feel might be better aligned with agribusiness and
19 TROF programs. There are 13 pages, I can potentially read to
20 you over the next couple of hours. Do you have a preference on
21 how you'd like to proceed alternatively, then I'll be happy to talk
22 about it.

23 DELEGATE BYRON: Summarize as best you can.

24 DELEGATE MARSHALL: I have a motion, and all this
25 was sent out to us before, so I make a motion we accept the

1 staff recommendations for the seven projects to go to vetting.

2 MR. HAMLET: Second.

3 DELEGATE BYRON: Why don't we, since people have
4 read their staff recommendations, is there any particular you
5 might have a question and you can pull it out of that group.

6 SENATOR RUFF: Madam Chairman, 2865. We'd have
7 to amend our policy to get that project under development now.

8 DELEGATE BYRON: Why don't we pull that out. Any
9 others?

10 DELEGATE MARSHALL: This group has been to us. I
11 think the top dollar was \$5 million or two. And then we said that
12 if they, if another project comes along, we are able to go above
13 the two or a new project or either a second phase of the project
14 comes along, then we would go above two.

15 DELEGATE BYRON: We have gone above the 2 million
16 in the past.

17 SENATOR RUFF: Madam Chair, I'm not trying to bring
18 harm to this, I'm trying to make sure that we, or that if we're
19 going to put it into a group, then we need to amend the policy on
20 that particular one. It might be easier to do the others and then
21 come back to this.

22 DELEGATE BYRON: I'll pull it out of the block.

23 SENATOR SMITH: Madam Chair, I do have some
24 questions on the 2868.

25 DELEGATE BYRON: We have 2871, 2867, 2869,

1 2870, 2872, all in a block to forward for vetting, based on the
2 staff recommendation. We have a motion and a second. All in
3 favor, say aye. (Ayes). Any opposed? (No response).

4 Then let's start with 2868.

5 MR. PFOHL: 2868 is submitted by the Halifax County
6 Industrial Development Authority in partnership with TMI
7 AutoTech, which is a long-standing company in the footprint and
8 designs high performance vehicles geared to amateur use,
9 including club races, track enthusiasts, school car programs, and
10 promotional vehicles. TMI is based in Halifax, and has been
11 involved with the Ariel Atom's car. This project would create 18
12 skilled jobs for a new vehicle called the SNIPER, that would be
13 manufactured in the Tobacco Region.

14 The proposal seeks funds for design and fabrication,
15 personnel, supplies, and material to construct three beta test
16 cars and conduct testing services and complete improvements for
17 their center. Matching funds are shown as \$985,000, and the
18 budget depends heavily on a private investor, with \$750,000,
19 and borrowing \$750,000. The matching funds is mentioned.

20 TMI, as reported, has met with both private investors
21 and banks regarding the private financing. There's little, if any,
22 project costs spent outside the Tobacco footprint from either
23 Commission funds or matching funds, and because of various
24 partnerships with SoVa Motion's 8 post shaker and the National
25 Tire Research Center, C-CARE coatings research facilities in

1 South Boston, and Danville Community College's RCATT center
2 for prototype development and so forth.

3 The applicant asks the project expenses incurred after
4 the application was submitted on March 15th be considered as an
5 eligible match, which seems a reasonable request and
6 demonstrates the project team's commitment to rapid
7 implementation of the project. There is some issue that staff has
8 raised with the Halifax IDA and TMI about using long-lived
9 equipment that will not be entirely dedicated to this project,
10 milling machines and so forth.

11 The bulk of the match would be coming from the
12 proposed private investment. The staff has recommended
13 vetting for this one.

14 SENATOR SMITH: I can get very excited about the
15 idea, but with that said, it looks like a neat toy and I'd like to
16 have one myself, but in all good faith, I just can't envision a
17 business model around, the funding is a problem.

18 DELEGATE MARSHALL: It is a toy. My father told me
19 you have wants and you have needs, and this is definitely a
20 want. Is somebody from TMI here? While they're coming
21 forward, it was mentioned before, they are currently
22 manufacturing a car called an Ariel Atom. It's a pretty neat
23 vehicle, and how many are you going to build?

24 MR. MARK SWAIN: I'm Mark Swain, I'm vice
25 president of marketing, as well as an owner in the company.

1 We've been in this for six years now, in the county, and working
2 on the Ariel Atom. This is a market for amateur enthusiasts.

3 Over the last six years, delivered on average, about
4 80 cars per year, all manufactured in Halifax. We started six
5 years ago, and we wrapped it up with 80 percent in-house
6 manufacturing on site in Virginia. Our site is within the industrial
7 complex, the International Raceway. We have a lot of high-end
8 clients that are using the Ariel Atom going forward, and we are
9 motorsport enthusiasts from way back, and they need another
10 vehicle, but it's certainly an acute market in the motorsports
11 world for a product like this.

12 Our proposed volume is ten cars the first year, and 20
13 cars thereafter on an annual basis. So, we feel we are in good
14 shape to go forward. A product like this is needed.

15 Other keynotes is that we have also on our site, other
16 marketing, as well as engineering support, and it's a subsidiary
17 of American Honda. We have good partners on board. We feel
18 there's a market for it.

19 DELEGATE BYRON: Delegate Marshall.

20 DELEGATE MARSHALL: So are the 80 cars you're
21 building, 80 Ariel Atom automobiles?

22 MR. SWAIN: Correct.

23 DELEGATE MARSHALL: And the price tag of those
24 are?

25 MR. SWAIN: It can range from our average is

1 \$70,000 to \$75,000 and have sold cars over \$100,000. We have
2 a new vehicle called SNIPER, \$135,000 price tag on the vehicle,
3 is a bargain if you can get it.

4 We saw a need for an amateur version or an
5 equivalent car would cost five or six hundred thousand. It lets
6 the amateur driver get out there with about a \$135,000 price
7 tag.

8 DELEGATE MARSHALL: So the idea is that it would be
9 a step up. A lot of drivers like to buy one, then go to the next
10 step. Some of the customers you've already sold these Ariel
11 Atoms to are in Virginia?

12 MR. SWAIN: Yes. Interest within the client base, and
13 then we have interest from others. On the global distribution
14 market in England, some folks want to investigate what we're
15 doing here. We feel very confident in this project.

16 DELEGATE MARSHALL: I don't know if this would be
17 appropriate, Madam Chair. Can I make a motion that he has to
18 let us drive the car?

19 DELEGATE BYRON: One of those sharing moments.

20 MR. LEONARD: Matt Leonard. We do think the
21 vetting on this is appropriate, and we'll be able to stand up to
22 that and there are other Research and Development assets that
23 have been put in place. This one project will use every one of
24 those. This project by itself will prove out both developments
25 and improvements in those assets, and the Tobacco Commission

1 has funded and appropriately put in place a brand new product in
2 the market and create those high tech jobs that this type of
3 project will bring.

4 Along with this, it was mentioned the upgrade to the
5 C-CARE Center, which includes an 1,100 square foot, and that
6 includes an 1,100 square foot carbon fiber composite pilot line
7 facility in that space that will be used by TMI to develop
8 component parts for this automobile and could spin off into a
9 carbon-fiber composite, part manufacture for other OEM. We
10 think that's important for Southern Virginia and the footprint to
11 be entering into the carbon fiber that's here to stay. We want to
12 make sure we're at the front end of that.

13 DELEGATE MARSHALL: Carbon fiber is not only used
14 for automotive purposes, it has to do with one of the Advanced
15 Manufacturing plants that we're looking for, and that's aviation.
16 Aviation uses a lot of carbon fiber and involves all the way down
17 to the jet engine parts. This is another way we'd be able for the
18 workforce and Southside to get other skills.

19 MR. LEONARD: Also, on the carbon fiber, and we're
20 starting with the three employees, now we have 20 employees.
21 Last year, we debated the submission to the Research and
22 Development based solely on the cost of carbon fiber. This
23 project now with vehicle development, brings in the research that
24 we wanted, but we're getting two approaches in one
25 development, but we want to commercialize the carbon fiber

1 outside of just the vehicle, but we have an immediate need for a
2 commercialized product for carbon fiber, and we'd like to grow
3 that carbon fiber facility into much more in the future. And we'd
4 certainly appreciate the chance to have it vetted.

5 DELEGATE BYRON: Thank you very much.

6 SENATOR SMITH: Is the Ariel Atom race vehicle, is
7 that produced in the footprint?

8 MR. SWAIN: Yes, absolutely, at Virginia International
9 Raceway, built it under license here out of England, so it's
10 manufactured in the footprint, all in Halifax County.

11 SENATOR SMITH: Earlier in the conversation, you
12 referred to the percentage that was contributed in the footprint,
13 some of those that you are assembling, are components
14 manufactured elsewhere?

15 MR. SWAIN: The numbers are right, and when we
16 started 2008, we were importing parts from England. Now, we
17 manufacture in-house everything from assemblies, all those
18 components, about 80 percent. There's 20 percent of the vehicle
19 that is purchased, 20 percent is purchased parts, and something
20 we've done, make a purchase in North America if possible. We're
21 manufacturing as much here right now, and next, if we have the
22 capability of a new vehicle, we would also have an immediate
23 need to build the components for the Ariel Atom, but we still
24 import some from England, but we turn that into an export, as
25 well.

1 SENATOR SMITH: Can you elaborate on what you're
2 actually manufacturing in Halifax in-house currently? Is it the
3 carbon fiber?

4 MR. SWAIN: Right now, with the Ariel Atom, we build
5 everything from the ground up, which includes the chassis,
6 tubular steel, bending, rolling, fabricating and welding, all the
7 components on the suspension, and then the final assembly in-
8 house.

9 SENATOR SMITH: The motor?

10 MR. SWAIN: The motor is purchased through
11 American Honda.

12 SENATOR SMITH: The motor is less than 20 percent
13 of the cost?

14 MR. SWAIN: It's up there, the engine and drive train
15 would be a high percentage cost of the vehicle.

16 SENATOR SMITH: Is the battery manufactured in the
17 footprint?

18 MR. SWAIN: That's purchased.

19 SENATOR SMITH: I was under the impression that
20 was the large percentage of the cost. My concern is how do we
21 go forward purely with this plan? A neat-looking vehicle, but so
22 much advancement has been made in carbon fibers, and it's very
23 expensive and gradually into other things, and it gets very
24 expensive like the Formula One Indy cars, and they're using a lot
25 of that. How do we make advancements or get new technology

1 that they have not figured out?

2 MR. SWAIN: Sure, one of the things we've done last
3 year, the way forward with the prototype facility like C-CARE,
4 and we can try to use carbon fiber in more products going
5 forward in the future, and that's a secondary benefit of the
6 project. Bringing down the costs from racing and the
7 manufacturing process will be very important.

8 What we've learned by being a member of the carbon
9 fiber consortium, even the manufacturers are different, but we're
10 on the right side of the development looking toward the future.

11 DELEGATE BYRON: Thank you. Keeping in mind our
12 timeframe, and these are applications just going to vetting,
13 although questions are appropriate.

14 DELEGATE MARSHALL: Madam Chairman, I make a
15 motion that we refer 2868 to vetting.

16 DELEGATE BYRON: 2868, staff recommended for
17 further vetting. All in favor, say aye. (Ayes). Any opposed?
18 One.

19 DELEGATE MARSHALL: I'm not quite sure the motion
20 we need to do to satisfy Senator Ruff.

21 DELEGATE BYRON: We'll talk about 2865 briefly.

22 SENATOR RUFF: Madam Chairman, I would move
23 that this particular project, a maximum of \$3 million.

24 DELEGATE BYRON: We're setting a new precedent,
25 because we've put a threshold of \$2 million out there, and this is

1 going to three.

2 DELEGATE MARSHALL: Second.

3 MR. PFOHL: Can I clarify that this is a one-time
4 exception or are we changing our policy across the board?

5 SENATOR RUFF: This is for, the motion is for this
6 project.

7 MR. PFOHL: Thank you. I would move that we send
8 it to vetting.

9 DELEGATE BYRON: We need further discussion, Tim,
10 I'd like to hear a little bit more about why we're jumping the
11 additional \$3 million, maybe the \$1 million could be obtained
12 somewhere else and we have a policy we decided on, does that
13 fall into any other categories, based on economic development?

14 MR. PFOHL: There is job creation projected at the
15 Tire Research Center, TROF might be an opportunity, but will not
16 generate, I don't think, anything close to the \$1 million, because
17 this exceeds the threshold. Talking 35 to 40 jobs in full
18 operation in five or so years, maybe even perhaps beyond five
19 years. Forty jobs would not generate a significant TROF in
20 reaching that job target in five, six, or seven years and beyond.
21 Seven years is beyond the TROF performance period, so I don't
22 think TROF necessarily would be a strong fit for this.

23 If I can very quickly, it would be a \$6 million task to
24 purchase and put into operation this driving simulator that has
25 nine degrees of freedom. The other matching funds could come

1 from the Automotive OEM and operational funds over and above
2 that to be raised to operate the center. They provided multi-year
3 operating expenses and costs and revenue projected. I
4 suggested to the applicants that perhaps a portion of their
5 revenues over some time period could claw back to the
6 Commission up to the million dollars, and this exceeds the
7 request for threshold and to say that that might have been coolly
8 received is accurate.

9 DELEGATE BYRON: Mary Rae Carter.

10 DEPUTY SECRETARY CARTER: Would it be a problem
11 for them if we approve the 2 million, to come back later?

12 MR. PFOHL: That might be a question for Dr. Dingas
13 and the project team.

14 DR. DINGAS: Would you repeat the question.

15 DEPUTY SECRETARY CARTER: Would it be a problem
16 if we looked at \$2 million on this round of applications, and then
17 you come back for another round for a million? Is that a problem
18 for you?

19 DR. DINGAS: The issue is the cost. On \$2 million, we
20 couldn't manage to purchase. It requires a \$3 million
21 commitment. We could move in that direction and do the best
22 we can, but it might be an impediment.

23 MR. PFOHL: They have a commitment of roughly \$6
24 million purchase, and that only gets them part way there, unless
25 you send them off to somebody else to raise 4 million.

1 DELEGATE MARSHALL: Can you inform the group, as
2 far as the people you have, are you getting ready to add a third
3 shift?

4 DR. DINGAS: Yes, we've been able to create Premier
5 Vehicle Tire, that particular testing facility. We have 30 sponsors
6 around the world, Asia, Europe, all the time. We appreciate how
7 hard it is to get from Asia to Virginia. As Delegate Marshall
8 pointed out, we're about to add a third shift. This summer, we'll
9 have 35 direct jobs, and we'll be running pretty much full all the
10 time.

11 The simulator or the simulator at the testing facility
12 adds a new dimension, and that is to virtually design cars. The
13 auto manufacturers we work with spend on the order of \$800
14 million a year physical prototypes of new models that they're
15 about to work on. With our testing capability, our ability to
16 generate data essentially what we're going to be able to do is to
17 drive a car state of the art with the simulator before it's ever
18 built so the manufacturer we work with expects to save a
19 minimum of \$100 million a year. This will create a critical mass,
20 and create the direct jobs that were mentioned, but will also
21 further entice companies to come and use it and potentially move
22 people to the footprint to use these confirmation factors and
23 facilities that are not located anywhere else in the world.

24 MR. RAYDITA: I'd like to point out also with regard to
25 the \$1 million. As a not-for-profit, we have committed to

1 keeping all operations of the facility in the footprint. If you say
2 we're going to take revenue that's generated in excess of
3 expenses and then we'd be able to produce less long-term
4 growth. Our model is not a model to go back to. Any
5 organization other than the Southern Virginia facility and the
6 cash load, and that helps create economic development, and this
7 would benefit the Tobacco Commission area.

8 DELEGATE BYRON: Tim, have we ever loaned money?

9 MR. PFOHL: In very rare instances in the very early
10 years of the Commission, I believe there were one or two loans.
11 We have capitalized revolving loans, we haven't made any direct
12 loans.

13 DELEGATE BYRON: You would still have another
14 opportunity to come back, and it's important to know that you
15 can raise that level of concern. Some people think just because
16 they put a grant in, they get dollar for dollar. I think you need to
17 note there's a lot of support for what you're doing, and it's a
18 great concern for our threshold for other applicants.

19 DELEGATE MARSHALL: Do we have a motion on the
20 table? I move that we send Application 2865 to vetting.

21 MR. PFOHL: We have a motion to increase.

22 DELEGATE BYRON: I would prefer not to put that in
23 there, rather move it forward to vetting. Do you want to
24 withdraw your motion?

25 MR. MARSHALL: My motion is to send 2865 to

1 vetting.

2 DELEGATE BYRON: Do we have a second?

3 DELEGATE CHAFIN: Second.

4 DELEGATE BYRON: We have a motion and a second.

5 All in favor of sending this to vetting, say aye. (Ayes). Any
6 opposed? All right.

7 The last one on the table very briefly, 2866.

8 MR. PFOHL: This is the request from Virginia State
9 University, \$809,000 and change requested to establish sweet
10 sorghum as a cash crop in Southside working in partnership with
11 Virginia Ecology MIR-Group, which is a private fund. This group
12 would research sweet sorghum varieties most suited to Southside
13 conditions, as well as researching some processes for turning
14 sweet sorghum into syrups and other byproducts.

15 The funds are requested for three years of research
16 and four test sites at four Southern Virginia counties, which are
17 Amelia, Dinwiddie, Nottoway, and Sussex. The funds are
18 requested to purchase a CASE-IH 8000 cane harvester for
19 \$330,000 cost, a Ford F-150 pickup, \$30,000, to build a shed to
20 house the harvester at the processor's site in Dinwiddie,
21 \$100,000, and for transfer payments to growers, \$75,000, to
22 demonstrate the sorghum variety and VSU research personnel,
23 \$274,000.

24 The majority of the request would use Commission
25 funds to purchase capital assets, such as the harvester, truck

1 and shed that will have useful life well beyond the three-year
2 research period. Staff has inquired about lease options for the
3 rolling stock and they have been explored. All matching funds
4 come from the private partner's financing and the processing site
5 will be located in leased space in Dinwiddie. The proposal sites,
6 77 new jobs, which appear to be 20 FTE and processing and 50
7 seasonable laborers with the private company and its supply
8 chain.

9 This type of project is more typically seen in the
10 Commission's Agribusiness Committee. The proposal mentions
11 lower income as an objective, which is a primary metric for
12 agribusiness. There appears to be little in the way of research
13 within the processing aspect. Little in the way of research, and I
14 don't believe there are any well-known processes for producing
15 sorghum syrup and some incremental research on using the
16 byproducts and feed and fertilizer, which also appears to be
17 generally known. The private company provides evidence of
18 committed financing and financing funds for buyers of their
19 products, which are positive. The staff has inquired if the
20 company has discussed the TROF program and other incentives
21 with Dinwiddie as viable inducements to secure the company's
22 commitment to the Tobacco Region.

23 Ultimately, staff is of the opinion that this proposal
24 does not align well with the intent of the R&D Program because
25 the predominant use of funds is to purchase long-lived assets

1 that will benefit the private company and alternatively could be
2 considered within other Commission programs, particularly
3 agribusiness and TROF, to achieve the desired outcome.

4 Staff recommends no further action on this proposal.
5 There are representatives here from Virginia State.

6 DELEGATE BYRON: Would you like to briefly speak?

7 MR. RADYAT: Yes, I would like to.

8 DELEGATE BYRON: Would you like to state your
9 name.

10 MR. RADYAT: Yes, my name is --

11 DELEGATE BYRON: Would you speak into the mike,
12 we can't hear.

13 MR. RADYAT: I appreciate the difficulties with, but
14 actually I think we have a good opportunity here. We've done
15 some work within the county and we believe that potentially
16 there is great benefit with winter wheat, because it is for and
17 requires moisture.

18 The reason why, even though all crops are, and it's
19 known, and promises to buy the raw material and processing
20 standards. For once, we have an opportunity to achieve this end
21 and to secure the resources to process this. So if we were to
22 proceed with this project, it would give us an opportunity to do
23 all this field work and go beyond the parameters to several
24 locations in Southside.

25 There is questions to be answered about this product,

1 and generally this a growth area. So from our perspective,
2 there's much interest in this and that's what we ought to pursue.
3 Many of the things raised in the summary, one involved the
4 investment in capital, and one of the most expensive items to
5 buy is the harvester. And for a short period of time, and we can
6 have an expansion into commercial business and to buy --
7 there is no commitment from the site, and we are prepared to
8 work hard towards our goal to provide a budget.

9 The other concern was, and I have to point out, and
10 we've worked on this, and only because this is a three-year
11 period of time to achieve commercialization because the nature
12 of field research is intended, so this is a platform upon which we
13 can grow and move in the fields, the fields where the work is
14 done.

15 Another concern was the plans within the processing
16 end of things. We have to be realistic that in three years we
17 must show efforts to move towards our goal and do that
18 according to plan. As time goes by beyond the three-year
19 period -- especially when you speak about processing. So we
20 just believe this is a very good opportunity. I know it was
21 mentioned, agribusiness, but it is my experience in the
22 agribusiness side, there is business in Southside, and some are
23 not willing to invest, and my experience in the Tobacco Region.
24 At the same time, also, I think there's supposed to be.

25 So, my request is --

1 DELEGATE BYRON: I want to say that we certainly
2 appreciate your coming forward today and we've been sitting
3 through several hours of this application session. You'd have an
4 opportunity, if we didn't have so much work in front of us, to see
5 these different type of products and what level of Research and
6 Development are addressed and in front of this committee. I
7 know you've been working with the staff for some time, and you
8 have to be in order to get to this point.

9 At the same time, apparently, your application was
10 not strong enough and you're not the first one, so you're not
11 being singled out today. There have been many others before
12 you that have had to go back to the drawing table and relook at
13 what they're trying to accomplish and perhaps strengthen their
14 application or maybe look in other areas. That's where we are at
15 right now. You need to go and do a little bit more research and
16 look at what the Tobacco Commission requires and where some
17 of your strengths and weaknesses are at this point and in the
18 initial stage of the process. You are welcome to come back again
19 with an application that has more, that might make it appealable
20 to the Committee, but we're not at that point today in
21 accordance with our staff recommendation.

22 We do appreciate your coming here and expressing
23 what your application is all about. Thank you very much.

24 MR. PFHOL: We have one request for a grant
25 extension, it's Grant Number 1665, to construct the Southwest

1 R&D Center in the Abingdon Bristol area and requesting a 12-
2 month extension to April 1st, 2015, and the building is
3 substantially complete. There are some additional build-out, but
4 they would like some time to use the remaining funds to assist
5 tenants they're hoping to attract to the building. This is one of
6 the energy research centers that's the focus of this program.
7 Staff is supportive of that request.

8 DELEGATE MARSHALL: So moved.

9 SENATOR CARRICO: Second.

10 DELEGATE BYRON: All in favor of a 12-month
11 extension of one of the energy centers, say aye. (Ayes). Any
12 opposed? (No response).

13 Next on the agenda is application date.

14 MR. PFOHL: If we remain on a typical cycle, staff
15 would take new applications in early July and early October. At
16 some point in the past, the Committee has called a time out and
17 take a cycle off.

18 DELEGATE BYRON: We just had a big load in front of
19 the partnership and if we want to think about this, we can still
20 address it today or address it in that morning meeting that we're
21 going to have before the full Commission meeting. Let's just
22 wait, all right?

23 MR. PFOHL: That's it. The Committee will reconvene
24 prior to the full Commission meeting to address the Bristol
25 Compressors' proposal.

1 DELEGATE BYRON: Do we have any public comment?

2 UNIDENTIFIED: The Southwest Virginia Higher Ed
3 Center, I have some T-shirts, which are over here. We're
4 providing them to the members of the Commission.

5 MR. PFOHL: Did we pay for those?

6 UNIDENTIFIED: No.

7 DELEGATE BYRON: Are they under \$50?

8

9

10 **CONCLUSION OF MEETING.**

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

CERTIFICATE OF THE COURT REPORTER

I, Medford W. Howard, Registered Professional Reporter and Notary Public for the State of Virginia at Large, do hereby certify that I was the Court Reporter who took down and transcribed the proceedings of the **Virginia Tobacco Indemnification and Community Revitalization Commission, Research and Development Committee Meeting**, when held on Wednesday, May 7, 2014, at 9:00 o'clock a.m., at the Hotel Roanoke & Conference Center, Roanoke, Virginia.

I further certify this is a true and accurate transcript, to the best of my ability to hear and understand the proceedings.

Given under my hand this _____ of May, 2014.

Medford W. Howard

Registered Professional Reporter

Notary Public for the State of Virginia at Large

MY COMMISSION EXPIRES: October 31, 2014.