

1                                   **VIRGINIA TOBACCO INDEMNIFICATION**  
2                                   **AND COMMUNITY REVITALIZATION COMMISSION**

3                                   701 East Franklin Street, Suite 501  
4                                   Richmond, Virginia 23219

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9                                   **Research and Development Committee Meeting**

10                                   Monday, January 6, 2014

11                                   3:30 P.M.

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13                                   Hilton Richmond Hotel & Spa/Short Pump  
14                                   12042 West Broad Street  
15                                   Richmond, Virginia 23233

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 of Commerce and Trade

6 Rural Economic Development

7 Mr. Burgess "Butch" H. Hamlett, III

8 The Honorable Daniel W. Marshall, III

9 Ms. Sandra F. Moss

10 Dr. Todd Pillion

11 Mr. Kenneth O. Reynolds

12 The Honorable Frank M. Ruff, Jr.

13 The Honorable Ralph K. Smith

14

15 COMMISSION STAFF:

16 Mr. Timothy S. Pfohl – Interim Executive Director, Grants

17 Program Administration Director

18 Mr. Ned Stephenson – Deputy Executive Director

19 Ms. Sarah K. Capps – Grants Program Administrator,

20 Southside Virginia

21 Ms. Sara G. Williams – Grants Program Administrator,

22 Southwest Virginia

23 Ms. Carolyn Bringman – Performance Data Analyst

24 Ms. Stephanie S. Kim – Director of Finance

25 Ms. Stacey Richardson – Executive Assistant

1 DELEGATE BYRON: Good afternoon, the  
2 R&D Committee will come to order and I'll ask Tim if you will  
3 please call the roll.

4 MR. PFOHL: Delegate Byron?

5 DELEGATE BYRON: Here.

6 MR. PFOHL: Senator Carrico?

7 SENATOR CARRICO: Here.

8 MR. PFOHL: Deputy Secretary Carter?

9 DEPUTY SECRETARY CARTER: Here.

10 MR. PFOHL: Mr. Hamlett?

11 MR. HAMLETT: Here.

12 MR. PFOHL: Delegate Marshall?

13 DELEGATE MARSHALL: Here.

14 MR. PFOHL: Ms. Moss?

15 MS. MOSS: Here.

16 MR. PFOHL: Ms. Nyholm is out of the  
17 country and can't be with us, Mr. Owens is not on the  
18 Commission anymore. He's here but we'll talk more about  
19 that tomorrow. His replacement is Dr. Todd Pillion.

20 DR. PILLION: Here.

21 MR. PFOHL: Mr. Reynolds?

22 MR. REYNOLDS: Here.

23 MR. PFOHL: Senator Ruff?

24 SENATOR RUFF: Here.

25 MR. PFOHL: Senator Smith?

1 SENATOR SMITH: Here.

2 MR. PFOHL: Ms. Thomas?

3 MR. THOMAS: Here.

4 MR. PFOHL: You have a quorum.

5 DELEGATE BYRON: Thank you. We  
6 want to welcome Dr. Todd Pillion. This is a very unique  
7 Committee, I'm sure that's the right word and we've come a  
8 long way so if there's anything we can help you out with as far  
9 as the applications getting reviewed or anything else we'll  
10 certainly be glad to do that in this process. Today we have  
11 applications coming before us that are getting ready to go to  
12 vetting. Now, let's go ahead and approve the minutes from  
13 9/25/13, which are posted on the website. I have a motion  
14 and a second. All those in favor say aye. (Ayes.) Opposed?  
15 (No response.) The minutes are approved. We have nine  
16 requests this afternoon. Three have been withdrawn and one  
17 has been reduced and maybe if we wait a couple more week  
18 we might not have it. That's what we have before us today  
19 and before we get into that, we're going to hear from Carolyn  
20 Bringman on the funding status update.

21 MS. BRINGMAN: In 2009, the  
22 Commission budgeted \$100 million to invest in Research and  
23 Development projects. Today, \$67.3 million have been  
24 invested, which leaves a remaining balance of \$32.7 million.  
25 Today we have six new requests totaling \$9.1 million for

1 review and determination of vetting. If you were to approve all  
2 of those, that would leave a remaining balance of \$23.6  
3 million. In May of 2013, the Commission evaluated the  
4 results of its investments in R&D projects and seven of the  
5 nineteen projects began commercialization from technology  
6 efforts in the Tobacco Region. There are 158 new FTEs with  
7 an average salary of over \$68,000 that supports the  
8 commercialization efforts in the Tobacco Region. Over \$18  
9 million in private capital investment has been made in the  
10 Tobacco Region from commercialization efforts. In addition  
11 between \$251,000 and \$1.1 million in revenue from sales. We  
12 have plans later this year after the fiscal year to evaluate the  
13 results again. Are there any questions?

14 DELEGATE BYRON: Does anyone have  
15 any questions? Thank you very much. We certainly  
16 appreciate the work you've done. I think I mentioned before  
17 or maybe even a year ago trying to plan some kind of trip  
18 where we could go around and I think we'll talk about that  
19 again in the spring and to move in that direction and I'd like to  
20 include the rest of the members of the Commission to go  
21 around and see some of our projects, especially the ones that  
22 are into commercialization already and try to plan a road trip  
23 to see what our investments are doing.

24 SENATOR RUFF: The seven projects that  
25 are developed into commercialization, how much did we invest

1 in those?

2 MS. BRINGMAN: I don't have that  
3 number off the top of my head but I can get it and get back to  
4 you.

5 DELEGATE BYRON: Any other  
6 questions? All right, thank you. Tim?

7 MR. PFOHL: We provided a staff report  
8 to you about a week ago and I remind you that the Committee  
9 chose to skip applications cycle in the summer of 2013, so we  
10 do not have any projects emerging from Mr. Giles vigorous  
11 vetting process at this point. That is to say that we have no  
12 final funding decisions for the Committee at this time. Your  
13 primary focus today is the remaining six proposals from the  
14 nine you received November 1<sup>st</sup>. As Delegate Byron pointed  
15 out, three of the nine withdrew the applicants. As Carolyn  
16 pointed out, the remaining six projects are requesting \$9.1  
17 million and the staff provided a report recommending tabling  
18 one project from the City of Danville, which is Ellipsis and  
19 they're going to make some revisions to their request. The  
20 other five remaining projects will be Lee County IDA, two  
21 projects from the Southwest Virginia Higher Education Center  
22 Foundation. And that is the Optafuel Lignocellulosic Biomass  
23 Project. The second one from Southwest Higher Ed is an  
24 initial request for Battery-Powered Coal Hauler for Low-Seam  
25 Underground Coal Mining and that's in Tazewell County. The

1 University of Virginia Fermata V2G Project is recommended  
2 for vetting. The next one is Washington County Industrial  
3 Development Authority, Bristol Compressors to develop  
4 Flammable Refrigerant Testing and Product Qualification and  
5 new energy guidelines. All those are summarized in the report  
6 that was sent to you.

7 DELEGATE BYRON: Yes.

8 MR. PFOHL: The first one is the City of  
9 Danville Ellipsis Development of cross-media solutions  
10 requesting \$2 million on behalf of Ellipsis Inc. to refine and  
11 develop the company's quote conductive ink print system  
12 unquote that enables an interactive experience for users of  
13 smart phones and tablets. This is characterized as  
14 groundbreaking technology that will have global appeal in a  
15 variety of areas including interactive and marketing and  
16 advertising campaigns, brand authentication and product  
17 registration. This is technology developed by Ellipsis and  
18 provided at much lower cost. This is recognition of the CLEF  
19 technology. They have done tests. Research headquarters  
20 and manufacturing operations would be based in Danville  
21 with 17 jobs and \$500,000 in capital investment. One  
22 hundred percent of Commission funds for research purposes  
23 including principally personnel expenditures and contractual  
24 services, the match is not yet secured. It appears that the  
25 total research phase, those are expected to cost \$2.4 million

1 and staff believes this is an appropriate project to do cost  
2 shared using \$1.2 million of Commission funds. Staff  
3 recommends this application be tabled pending budget  
4 revision to focus exclusively on the research project and allow  
5 Ellipsis to secure necessary matching funding.

6                   The next active request is from the Lee  
7 County Industrial Development Authority Demonstration and  
8 Commercialization of HHS Coal Refining Process for Economic  
9 Development. They're requesting just shy of \$1.2 million to  
10 enable Minerals Refining Company LLC and we'll call that  
11 MRC for short, a Richmond based corporation, to engineer  
12 and construct a pilot dewatering facility capable of processing  
13 one ton per hour of ultra-fine coal particles using a  
14 hydrophobic-hydrophilic process, you won't hear those words  
15 out of my mouth again. Bench scale proof of concept research  
16 was done at Virginia Tech and the objective is to  
17 commercialize the HHS process for which MRC has exclusive  
18 worldwide license and Virginia Tech intellectual property to  
19 accomplish commercialization. The pilot facility would require  
20 just five employees and beneficiary indicates that it will own  
21 and operate adjunct plants which will use the HHS technology  
22 as a contracted processor at nine coal mineral processing  
23 plants across Southwest Virginia. In effect, they'll set up this  
24 coal mining process and take the particles and dewater them.  
25 The private beneficiaries would own the equipment except for

1 the Commission's long-standing policy, the budget could be  
2 modified such that necessary equipment and expenditures  
3 with half of the project costs be paid with Commission funds  
4 and owned by the Lee County IDA and leased to the project  
5 beneficiary. Milestones and deliverables are clear and  
6 measurable and the Tobacco Commission financing amount  
7 appears to be in hand. Staff recommends that this be referred  
8 to VEDP for vetting.

9  
10 Southwest Virginia Higher Education  
11 Center Foundation request for Biochemical Conversion of  
12 Lignocellulosic Biomass Optafuel, project #2833 requesting \$2  
13 million. This is the third award benefitting Optafuel Tobacco  
14 Region. They were awarded funds twice under a previous  
15 grant and this will end up with three requests. Their initial  
16 awards came under different guidelines. Their objective is to  
17 demonstrate at a pilot scale within the lab at Norton, Virginia,  
18 an integrated chemical enzyme process allowing for the  
19 conversion of multiple cellulosic biomass feedstocks to  
20 ethanol, lignin and other high value biochemical and  
21 biomaterials. The technology platform OptaLysis was  
22 developed by Biomethodes SA and Virginia Tech and OPTOR  
23 intends to market the process to the North America industrial  
24 customers. A commercial scale 35 jobs are estimated along  
25 with \$103 million in capital investment. Half of the  
Commission's money will be used for personnel with lesser

1 amounts spread across all budget categories. Southwest  
2 Higher Ed is proposing to be an equity partner in this initiative  
3 and proposes the Commission funds invested as equity. The  
4 deliverables are clear and measurable and neither of the first  
5 two awards have been fully disbursed and the original grant is  
6 nearly 90% disbursed but more than 60% of the Phase II grant  
7 remains undisbursed. The most recent award was in January  
8 2012 and did not receive review by VEDP vetting group. So  
9 staff recommend referral to VEDP for vetting.

10 DELEGATE MARSHALL: Question. Last  
11 year, we didn't refer it to VEDP?

12 MR. PFOHL: The Phase II grant was just  
13 approved without referring it. Or it's not known how close  
14 they are to commercialization.

15 DELEGATE MARSHALL: Southwest  
16 Higher Education is going to have equity?

17 MR. PFOHL: That's what they're  
18 proposing subject to whether or not they can live with that.

19 MR. HAMLETT: The timing on the Phase  
20 II is that close to the proposed time?

21 MR. PFOHL: I believe that's probably  
22 correct. They're probably pretty close to the timeline they gave  
23 us originally.

24 MR. REYNOLDS: How many employees?

25 MR. PFOHL: They have close to thirty

1 employees, I believe, in Virginia. That's at Norton. We've been  
2 out to see the labs. These are highly educated, highly skilled  
3 folks. If there's no other questions, I'll move on.

4                   The next is Southwest Virginia Higher Ed  
5 Center Foundation Battery-Powered Coal Hauler for Low-  
6 Seam Underground Coal Mining #2830. The request is for  
7 \$1,148,863. Consistent with our staff policy, this is in  
8 Tazewell County and the Foundation has abided by the project  
9 budget. To finalize product development and begin  
10 manufacturing and sales of an innovative battery-powered  
11 coal hauler for low-seam underground coal mining. The  
12 equipment company is in Tazewell. Simmons was established  
13 in 2005 as a designer, manufacturer and servicer of battery-  
14 powered mining equipment. Although the company's industry  
15 expertise dates to the 1960s and earlier. Design and  
16 development of the battery-powered hauler is already  
17 underway. The application initially listed 53 new jobs but that  
18 figure has been subsequently revised to thirty, which aligns  
19 with the company's confidential business plan. Private capital  
20 investment is projected at \$1.9 million and these figures  
21 would be required to first and fully comply with the terms of  
22 the grant agreement. Project activities and expenses indicate  
23 that product development and refinement, including placing  
24 haulers in the field and securing feedback from customers,  
25 will require eighteen months. Matching funds are not yet

1 committed and available and the company is currently raising  
2 equity and anticipates additional bank financing consistent  
3 with established policy, no Tobacco Commission monies  
4 would be disbursed until all financing necessary to  
5 accomplish the objectives is secured. The grant that's  
6 invested as equity and/or convertible debt in the company will  
7 be held by the Foundation with any investment returns to be  
8 used by the Foundation to fund future R&D projects. Staff  
9 recommends referral to VEDP for vetting.

10 DELEGATE BYRON: Have we ever made  
11 grants like this to the Higher Ed Center?

12 MR. PFOHL: I'll have to kick that over to  
13 Ned because he's handled grant agreements and R&D.

14 MR. STEPHENSON: Madam Chairman,  
15 we have made grants like this to the Higher Ed Center  
16 Foundation. Is that the essence of your question? With the  
17 equity investment aspect of it, I might say.

18 MR. PFOHL: R&D and Southwest Higher  
19 Ed including any wording about the Higher Ed Foundation  
20 using our funds as an equity investment as a private  
21 beneficiary.

22 MR. STEPHENSON: I don't think the  
23 grants speak to that. I don't remember any occasion that  
24 we've done that.

25 MR. RODGERS: On behalf of the Higher

1 Ed Center Foundation, the last two awards that this  
2 Committee and in October and one prior to that in May, the  
3 grant was structured that way. That was proposed to staff  
4 and that was approved. The theory behind it is that if you find  
5 a company looking for free money, we feel like they have less  
6 to offer the Tobacco Region. If you find companies that have  
7 to give up something funding, then they're pretty serious when  
8 they come here. It could be that the Commission itself is the  
9 equity owner. We could structure it that way.

10 MR. STEPHENSON: I do recall that  
11 conversation with Ed Rodgers and that approach for the  
12 reasons he states. It requires companies to give up something  
13 to get to that piece of money.

14 MR. PFOHL: The final funding decision  
15 will be made in May.

16 DELEGATE MARSHALL: But at this  
17 moment it's not about vetting, but today's decision is to vet or  
18 not to vet?

19 MR. PFOHL: Correct. The next proposal  
20 is from the University of Virginia Fermata LLC V2G Project  
21 grant #2831 requesting \$2 million for a three year period to  
22 enable Fermata LLC, a Charlottesville based corporation  
23 created by UVA researchers to develop technology that enables  
24 electric vehicles and plug-in hybrids to provide energy storage  
25 for the grid. Specific tasks for the vehicle to grid or V2G

1 project include R&D on the development of a vehicle drive  
2 train, a vehicle battery pack, a bidirectional V2G charger and  
3 V2G software, based on technology developed at University of  
4 Delaware and licensed to Fermata. Fermata is working with  
5 the City of Danville to identify possible locations for a V2G test  
6 facility with a live grid interconnect and looking initially at  
7 10,000 square feet going to 20,000 by 2016. Fermata states  
8 that \$2.7 million of private capital investment has already  
9 been raised to meet the program match requirements and 127  
10 direct manufacturing jobs are expected to result by 2017. The  
11 technology would be built and tested over a three year period.

12 Milestones and deliverables are clear and measurable.

13 Commission funds would be used on all line items with most,  
14 approximately 90% supporting personnel expenses. Fermata  
15 anticipates spending at least one million of the matching  
16 funds in the Tobacco footprint. Staff recommends referral to  
17 VEDP for vetting. This one still is at a request for \$2 million.

18 MR. HAMLETT: The balance of the funds  
19 are outside of the footprint?

20 MR. PFOHL: The matching funds, our  
21 funds would be spent in the footprint plus \$1 million of the  
22 matching funds in the footprint and then \$1.7 million or so of  
23 the matching funds would be spent outside the footprint.

24 MR. HAMLETT: Headquarters is  
25 Charlottesville?

1 MR. PFOHL: But there's some places in  
2 California where there would be some testing done.

3 The final request is the Washington  
4 County Industrial Development Authority IDA Bristol  
5 Compressors International Inc. Flammable Refrigerant Testing  
6 and Product Qualification #2832 requesting \$808,744 to  
7 enable Bristol Compressors International to establish an on-  
8 site testing facility to safely develop and evaluate flammable  
9 types of refrigerants such as propane that are consistent with  
10 mandated low Global Warming Potential standards. Testing  
11 with competitor's products is underway and this project is  
12 viewed as essential for Bristol Compressor's International to  
13 maintain and grow market share as an Underwriter approved  
14 worldwide lab as a supplier of compressors to major original  
15 equipment manufacturers such as Goodman and Rheem. In  
16 order to convert to lower emission standards, Bristol wants to  
17 test propane as the refrigerant. Staff believes that the budget  
18 could be modified such that the Commission funding would be  
19 used for equipment purchases. Those are listed there and  
20 that would be owned by IDA and leased on a nominal basis to  
21 the beneficiary Bristol Compressors. No new employment is  
22 projected though anticipated \$80 to \$120 million in new  
23 business and described as the equivalent of growing Bristol by  
24 300 to 500 employees. Milestones and deliverables are  
25 measurable. Non-Commission financing is committed and

1 available, staff recommends referral to VEDP for vetting. That  
2 concludes the five proposals.

3 DELEGATE BYRON: Any questions?

4 MR. REYNOLDS: I suggest that we  
5 recommend those five.

6 DELEGATE CARTER: I'll second the  
7 motion.

8 DELEGATE BYRON: We have a motion  
9 and a second to recommend these projects to VEDP for  
10 funding. All those in favor say aye. (Ayes.) Opposed? (No  
11 response.) All right, the next order of business is grant  
12 beneficiary relocation.

13 MR. STEPHENSON: Madam Chairman,  
14 you have approved a repurpose development grant for an  
15 entity in Wise County made to the Wise County IDA. That  
16 particular research entity is now seeking permission from  
17 Wise County from the Commission to move its research and  
18 development operations from Wise County to Prince Edward  
19 County. There is some information that we need to fully  
20 inform you about this and we do not yet have it. Time is  
21 somewhat of the essence, I put this on the table to ask if you if  
22 you would consider some limited approval of this geographic  
23 transfer with certain limitations to make sure that both Wise  
24 and Prince Edward are equally protected and the beneficiary  
25 was going to do what they said they were going to do. So I'll

1 open it up to questions that you might have. We can either  
2 table the request or we can find a way to make a motion so it  
3 can happen before May.

4 DELEGATE MARSHALL: Ned, several  
5 years ago we had a project, one of our first R&D projects for a  
6 fuel plant in Henry County still hasn't moved forward. There  
7 was a request to move that project from Henry County to  
8 Greenville County and the purpose was so that they could get  
9 closer to the port so they'd pay less freight and we said we  
10 wouldn't do that at that time. Why do they want to move to  
11 Prince Edward?

12 MR. STEPHENSON: Those reasons are  
13 not entirely clear to me. There are some stated reasons but I  
14 don't know the whole story yet. They're currently negotiating  
15 with Wise County for an agreement or in other words to honor  
16 their obligations to Wise County to Wise County's satisfaction.  
17 They are negotiating presently and I don't know what the  
18 outcome of that will be.

19 SENATOR CARRICO: Madam Chairman,  
20 if they're still negotiating, do we take action?

21 MR. STEPHENSON: It's up to you.

22 SENATOR CARRICO: I'd make a motion  
23 we table it.

24 MR. HAMLETT: Second.

25 DELEGATE BYRON: Any further

1 discussion?

2 MR. HAMLETT: Is there a critical timing  
3 issue, Ned?

4 MR. STEPHENSON: Nearly everything we  
5 touch is time-sensitive. What I know is I don't think tabling it  
6 is a bad motion.

7 DELEGATE MARSHALL: The original  
8 project was approved by the County, when was that?

9 MR. STEPHENSON: I don't have the date  
10 before me.

11 MR. PFOHL: It was approved January of  
12 2012.

13 DELEGATE BYRON: We have a motion  
14 and a second to table it. All those in favor say aye. (Ayes.)  
15 Opposed? (No response.) All right, that passes.

16 MR. PFOHL: Madam Chairman, the  
17 rebudgeting of grant approved in September and it's grant  
18 #2699, Southwest Virginia Higher Ed Center Foundation to  
19 benefit Lite Sheet and they've asked to approve a revised  
20 budget. They moved about 60% of our funds into different  
21 time categories and when that type of material change and  
22 scope occurs, that's to be brought back to the Committee to  
23 approve that. The staff has no reason to find any objection to  
24 the requested budget changes. We do have documentation  
25 and Mr. Rodgers is here to speak to that if need be the

1 reasons behind the request and use of funds. There's no red  
2 flags on this. It's just a policy issue essentially.

3 DELEGATE MARSHALL: If there's no  
4 objection, I move we approve it.

5 MR. PFOHL: If the Committee is inclined  
6 to approve the rebudgeting of this submitted to the staff.

7 DELEGATE BYRON: Anyone have any  
8 questions about that?

9 MR. PFOHL: It continues to meet all the  
10 matching fund requirements. It's just money from the  
11 equipment line to personnel services and some other aspects.

12 DELEGATE BYRON: All right. All in  
13 favor say aye. (Ayes.) Opposed? (No response.) All right, that  
14 ends our business. Is there any public comment? If so, come  
15 forward. If you don't speak it won't help your grant  
16 application, does anyone want to say anything at this time?

17 MR. GILES: Madam Chairman, in terms  
18 of we hope to have the results of all this by the end of March.

19 DELEGATE BYRON: Just if any of you  
20 don't know Mr. Giles is handling the vetting process. If  
21 anybody would like to go to that process, you're invited to go.  
22 It certainly will enlighten you and give you a chance to see all  
23 that goes on. If you have any questions contact staff.

24 MR. GILES: The results will be due in  
25 March.

1 DELEGATE BYRON: I want to thank you  
2 very much, Mr. Giles for the work you do and for being here  
3 today. New application deadline will be?

4 MR. PFOHL: Staff suggests the next  
5 deadline would be on or before March 1<sup>st</sup>.

6 DELEGATE BYRON: March 1<sup>st</sup> is the new  
7 application deadline. So if there's no further comments, we'll  
8 adjourn.

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10 PROCEEDINGS CONCLUDED.

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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 Monday, January 6, 2014 at 3:30 p.m. at the Hilton Richmond Hotel & Spa in Short Pump, Richmond, 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 22<sup>nd</sup> day of January, 2014.

\_\_\_\_\_

Medford W. Howard  
Registered Professional Reporter  
Notary Public for the State of Virginia at Large

My Commission Expires: October 31, 2014.  
Notary Registration Number: 224566